



ROYAL SANITARY INSTITUTE
LONDON
S.W.

1927.
—
QUEENSLAND.

ANNUAL REPORT

OF

THE COMMISSIONER OF PUBLIC HEALTH

TO

30TH JUNE, 1927.

PRESENTED TO PARLIAMENT BY COMMAND.

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LONDON
1927

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ANNUAL REPORT OF THE COMMISSIONER
OF PUBLIC HEALTH.
1926-1927.

TO THE ASSISTANT UNDER SECRETARY, HOME SECRETARY'S DEPARTMENT.

Brisbane, 22nd August, 1927.

STATISTICAL.

SIR,—I have the honour to submit the following particulars regarding the work carried out by my Department during the past twelve months ending the 30th June, 1927, as well as my comments regarding Public Health administration for the State of Queensland.

The following tables record statistical information in respect to the crude birth rate, the death rate, and the infantile mortality rate of this State as well as the other States of the Commonwealth and several parts of the Empire.

CRUDE BIRTH RATE.

Country.	Year.	Birth Rate.	Year.	Birth Rate.
Queensland	1925	23·82	1926	22·58
New South Wales	1925	24·01	1926	22·89
Victoria	1925	21·49	1926	20·84
South Australia	1925	21·06	1926	20·55
Western Australia	1925	22 23	1926	22·14
Tasmania	1925	24·24	1926	23·62
Commonwealth	1925	22·89	1926	22·02
New Zealand	1925	21·17	1926	21·05
England and Wales	1924	18·8	1925	18·3
Scotland	1924	21·9	1925	21·3
Irish Free State	1924	20·1	1925	19·6
Canada	1924	23·1	1925	22·6
South Africa	1924	26·5	1925	26·5

DEATH RATE.

Country.	Year.	Death Rate.	Year.	Death Rate.
Queensland	1925	8·86	1926	9·39
New South Wales	1925	9·16	1926	9·55
Victoria	1925	9·47	1926	9·63
South Australia	1925	9·15	1926	8·73
Western Australia	1925	9·00	1926	8·93
Tasmania	1925	9·35	1926	9·05
New Zealand	1925	8·29	1926	8·74
England and Wales	1924	12·2	1925	12·2
Scotland	1924	14·4	1925	13·4
Irish Free State	1924	14·3	1925	13·8
Canada	1924	9·8	1925	9·7
South Africa	1924	..	1925	9·4

RATES OF INFANTILE MORTALITY IN VARIOUS COUNTRIES.

Country.	Year.	Death Rate per 1,000 Births.	Year.	Death Rate per 1,000 Births.
Queensland	1925	45·4	1926	50·4
New South Wales	1925	54·95	1926	57·6
Victoria	1925	56·96	1926	55·7
South Australia	1925	46·09	1926	44·6
Western Australia	1925	56·81	1926	49·3
Tasmania	1925	55·19	1926	46·7
New Zealand	1925	40·0	1926	39·8
England and Wales	1924	75·0	1925	75·0
Scotland	1924	98·0	1925	91·0
Irish Free State	1924	71·0	1925	71·0
Canada	1924	79·0	1925	79·0
South Africa	1924	74·0	1925	68·0

The tables in respect to this State are not quite as satisfactory as in former years for a country which has so much to commend it from a health point of view.

The crude birth rate maintains a fair standard as compared with the other countries shown in the table, but the death rate as well as the infantile mortality rate could be better.

In connection with the increase in infantile mortality, on inquiry from the Registrar-General I ascertained that the deaths of children

under one year were due principally to enteritis (31 cases) and early infancy (20 cases). This calls for early and urgent attention by the Child Welfare Centre. It was also pointed out to me that of the increase of 5 per cent. nearly half has occurred in the area of the City of Brisbane, the exact figures being 2.3 per cent., leaving 2.7 per cent. for the remainder of the State. The increased rate is also accounted for from the fact that there has been a decrease of 517 in the births, and the deaths of infants increased by 77.

			Persons.
Estimated population for calendar year 1926	..	..	882,193
Estimated population for calendar year 1925	..	..	861,185
Estimated mean population for calendar year 1926	..	..	875,187
Estimated mean population for calendar year 1925	..	..	851,419

COMMUNICABLE DISEASES (Exclusive of Venereal Diseases). *Brisbane Area.*

	1925-26.	1926-27.
Anchylostomiasis	1	..
Cerebro-spinal Meningitis	7	7
Diphtheria	799	837
Erysipelas	68	63
Infantile Paralysis	30	9
Malaria	1	..
Membranous Croup .. ..	..	..
Pulmonary Tuberculosis	186	230
Puerperal Fever	12	20
Relapsing or Continued Fever	1	..
Scarlet Fever	165	361
Typhoid Fever	66	72
Total	1,336	1,599

For the Greater Brisbane area the above table denotes the incidence of infectious diseases during the year, and as compared with the preceding twelve months it will be noticed that the principal increase in the number of cases is in respect to scarlet fever, being 196 more, whilst puerperal fever and pulmonary tuberculosis show, unfortunately, an increase. Diphtheria also shows a slight increase.

As previously mentioned in my report of last year, the control of infectious diseases in the metropolitan area has been transferred from the jurisdiction of this Department to the Brisbane City Council, who deal with such matters under their Ordinances, which contain provisions regulating the precautions to be taken in respect to the control of infectious diseases.

Outside Areas.

	1925-26.	1926-27.
Anchylostomiasis .. ..	..	..
Cerebro-spinal Meningitis	9	6
Diphtheria	709	1,361
Dysentery (Thursday Island only)	10	18
Erysipelas	35	27
Infantile Paralysis	9	6
Malaria	1	1
Membranous Croup .. ..	..	..
Pulmonary Tuberculosis	156	178
Puerperal Fever	17	9
Relapsing or Continued Fever	1	..
Scarlet Fever	172	470
Typhoid Fever	148	221
Totals	1,267	2,297

Seventy-five cases of typhoid fever were reported from Barambah Aboriginal Settlement. No deaths occurred at the settlement; this outbreak was confined to the reserve.

An officer of this Department visited the locality and laid out a sanitary scheme for adoption, which is now being put in hand.

DIPHThERIA.

The peak of the cycle of this disease seems to have arrived this year, but the numbers were not confined to any particular area, as two-thirds of the Local Authorities of Queensland have had their share, viz., 100 out of 150, some with only one case, excepting Brisbane with 837 cases; the next in order of frequency was Ipswich with 156, Bundaberg with 119, Townsville with 81, Rockhampton with 75, Toowoomba with 67, Moreton with 60, the remainder being under 50.

In this connection I would point out that as far back as 1921 I strongly recommended to the Local Authorities, through my annual report of that year, immunisation against this disease by adoption of what is known as "Toxin Antitoxin Immunisation"; and again, two years ago, I wrote to the Councils above referred to recommending them to commence a campaign, but so far only two of them, Rockhampton and Ipswich, have made a start. Apparently the other Councils prefer to run the risk of having to pay hospital fees of £3 3s. per week rather than offer the simple means of prevention mentioned to the public. Toxin antitoxin immunisation is applicable to all, and especially to children of pre-school age. The procedure is simple, the reaction slight, and the cost a few pence only.

An article appeared in the "London Times" of 18th May, 1927, on the Prevention of Diphtheria by means of Toxin Antitoxin Immunisation. It states that the Ministry of Health has now completed its investigations, extending over several years, and is so fully satisfied in advocating this line of procedure that it does not consider it necessary to conduct further detailed inquiries, but will continue to urge its adoption by Local Authorities.

There is not the slightest doubt but that the immunisation of children by means of toxin antitoxin must appeal to all Health and Educational Authorities. This Department has recommended Local Authorities to advise parents to have their children rendered immune, but unfortunately with very little success. As I mentioned above, the only two Local Authorities

that have taken any practical steps are Rockhampton and Ipswich. However, it is hoped that after this year's experience some serious steps will be taken by Local Authorities to deal with this disease.

The advent of a medical staff under Dr. St. Vincent Welch to the Department of Public Instruction it is hoped will do much to reduce the incidence of diphtheria among school children. During the year this new branch has displayed activity towards the suppression of infectious diseases among those attending school by swabbing of children for the detection of diphtheria carriers.

As mentioned above, the peak of the cycle of diphtheria appears to have been reached, and from information from the southern centres such an appearance has also been manifested there during the period under review.

TYPHOID FEVER.

Typhoid fever shows an increase on the previous year's return—viz., 291 as against 214—which is accounted for by an outbreak of a mild form of the disease amongst the natives at Barambah, resulting in 75 cases; fortunately no deaths occurred among them.

After an explanation to the aborigines at this settlement of the efficacy of anti-typhoid vaccination, there was no difficulty in obtaining their consent to this being carried out, when some 430 were inoculated with this Department's vaccine, and in a very short time the disease was checked. The total number of doses supplied was 1,290, three doses being given to each person with weekly intervals.

Deducting these 75 cases, it practically leaves the total number similar to that of the previous report—216 to 214.

The only other places with double numbers above 10 from which cases were reported were Brisbane 72, Ipswich 20, and Toowoomba 11.

The country towns show small numbers, and nearly all Local Authorities throughout the State are enforcing the flyproofing of cabinets. It has been the Department's policy to pay strict attention to this matter, especially in areas along the railway lines, and so guard against the spread by the "carrier" and the disseminator of the disease—viz., the common house fly.

PLAGUE.

The never-ceasing war waged against the rat, which is the recognised disseminator of plague, continues to bear fruit, with the pleasing result that a record of no plague for several years past has been maintained; nevertheless, in view of plague being practically ever present in the East from where oversea shipping regularly visits our ports, it is necessary for officers entrusted with public health administration to ever remain on the *qui vive* and not relax in any way activities in respect to rat destruction.

The Government employ in Brisbane full-time efficient rat-men, who in addition have the services of trained rat dogs, the upkeep of the latter being defrayed by the Department at a cost of 3s. 6d. per week for each dog. These men attend to Government buildings, river retaining walls, &c., and have accounted for 1,714 rats and 52 mice, exclusive of rodents

destroyed by poison, the cadavers of which are not recovered, as the rodents seek refuge in haunts not get-at-able where they generally die. Poison is regularly made up at the Department's depôt and quantities are despatched to outside centres.

Under the Ordinances issued under "*The City of Brisbane Act of 1924*," the control and destruction of rats in that area is now vested in that authority, and during the period under review some 36,422 rats and 1,752 mice were submitted by them to this Department's Laboratory for bacteriological examination.

Rat smears, as heretofore, are submitted for examination from the principal ports and towns outside of the metropolis, and if not examined at the Department's Laboratory they are examined at other approved laboratories throughout the State.

During the past twelve months this Department's Laboratory examined 7,614 smears and 40,011 carcasses of rodents.

During the year the question of rat infestation has been kept under strict observation. Particular attention has been paid to the wharves, river retaining walls, and the water front of the Port of Brisbane generally.

The rat-proofing work which was carried out within the last few years is in good repair. Minor defects which occur, due to circumstances over which there is no control, have been made good from time to time.

Special supervision and inspection have been given to all the wharves where ships from plague countries are berthed. Two men from this Department's rat gang, who have long experience in this work, are constantly in attendance on and under the wharves whenever a ship from a country where plague exists is in port. The river walls from Toowong ferry to the Hamilton wall on both sides of the river are continuously patrolled and baited by two men from the gang. One man is detailed to attend to rat destruction work at the meatworks situated on the Brisbane River; poisoning and trapping methods are employed at these works; his sphere of action also extends along the Doughboy wall.

The attention of the Railway Department and the Brisbane City Council was directed to the necessity for the complete destruction of all disused drains from the premises which have been demolished along the line of the Kyogle Railway now under construction, and the sealing up of all openings at the sewers where such drains connected up so as to prevent the egress of rats from the sewers, and their passage or harbourage in the disused drains. Numerous inspections were made with the officials of the Departments named, and satisfactory arrangements were arrived at for the work to be done.

PULMONARY TUBERCULOSIS.

Acute Tuberculosis.—Cases have been notified from 48 centres, the principal places being where tuberculosis hospitals or sanatoria are situated—viz., Brisbane 230, Stanthorpe 43, Rockhampton 21, Dalby 14, Dunwich 12; the only other centre with more than 10 was Ipswich with 11.

I might state that, as a result of the formation of the Federal Health Council, of which I am

a member, it was decided at our first meeting in Melbourne to request the Commonwealth Department of Health to consult with the State Health Departments in order to prepare proposals concerning tuberculosis in each State for the next meeting of the Council, and as a result it is hoped that some definite co-ordinated action will be taken in the near future.

The Part-time Medical Officer attached to the Tuberculosis Bureau, who was absent through illness from Brisbane for two months of the financial year, reports that during the ten months

he was in attendance 83 cases presented themselves for examination; 53 were sent to sanatoria, 28 were recommended for admission to Diamantina Hospital for Incurables, and 2 were sent to Dunwich Benevolent Asylum.

One hundred and sixty-eight out-patients were interviewed and 215 consultations took place.

VENEREAL DISEASES.

The total number of cases notified was 1,458, *vide* table hereunder, and of whom it will be noted 139 were “duplicated,” leaving 1,319 new patients as against 1,401 last year and 1,503 for 1924-5.

Disease.	METROPOLITAN AREA.		OUTSIDE AREAS.		TOTAL.	
	Males.	Females.	Males.	Females.	Males.	Females.
Gonorrhœa	558	129	409	64	967	193
Syphilis, primary	42	6	46	6	88	12
Syphilis, secondary	27	4	2	4	29	8
Gonorrhœa and Syphilis	2	1	1	..	3	1
Gonorrhœa and Secondary Syphilis	1	..	..	..	1	..
Soft Chancre	1	..	3	..	4	..
Ulcerative Granuloma .. .. .	..	..	8	3	8	3
Venereal Warts .. .. .	..	..	1	..	1	..
Gonorrhœa and Granuloma .. .. .	..	..	1	..	1	..
Totals	631	140	471	77	1,102	217
Duplicate Cases (notified and not included above)—						
Gonorrhœa	46	11	65	..	111	11
Syphilis, Primary .. .. .	..	1	8	2	8	3
Syphilis, Secondary	1	..	..	1	1	1
Gonorrhœa and Syphilis .. .. .	..	1	1	..	1	1
Ulcerative Granuloma .. .. .	..	..	..	2	..	2
Totals	47	13	74	5	121	18
Grand Total of Notifications received ..	678	153	545	82	1,223	235

AGES OF PATIENTS NOTIFIED—(IN SEX GROUPS).
AGE GROUPS (YEARS).

Area.	Sex.	1-5.	5-10.	10-15.	15-20.	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55 and over.	Unknown or unstated.	Totals.
Metropolitan area ..	Male ..	..	..	1	63	174	147	101	62	25	19	9	15	15	631
Ditto ..	Female ..	7	7	1	14	35	33	19	7	5	2	2	..	8	140
Outside area ..	Male ..	..	..	..	46	127	117	65	33	23	14	8	10	28	471
Ditto ..	Female ..	2	3	1	8	25	13	3	4	2	1	2	..	13	77
Totals ..	Males ..	9	10	1	109	301	264	166	95	48	33	17	25	43	1,102
	Females ..	..	..	2	22	60	46	22	11	7	3	4	..	21	217
Grand Totals ..	..	9	10	3	131	361	310	188	106	55	36	21	25	64	1,319

SOCIAL STATUS OF PATIENTS (IN SEX GROUPS).

Social Status.	METROPOLITAN AREA.		OUTSIDE AREAS.		TOTALS.	
	Males.	Females.	Males.	Females.	Males.	Females.
Married	148	63	65	32	213	95
Single	456	68	405	34	861	102
Widower	9	..	..	..	9	..
Widow .. .. .	..	7	..	4	..	11
Separated	17	1	1	1	18	2
Unknown or unstated .. .. .	..	1	..	6	..	7
Divorced	1	..	..	..	1	..
Totals	631	140	471	77	1,102	217

STATED SOURCES OF INFECTION.

	AREA.		Totals.
	Metro-politan.	Outside.	
Prostitutes from houses ..	46	18	64
Prostitutes unknown ..	155	142	297
Non-professional (amateurs)	232	63	295
Wives	27	3	30
Husbands	23	9	32
Other sources	3	21	24
Unknown or unascertainable	285	292	577
Totals	771	548	1,319

Fifteen (15) of the infections were stated to have been contracted outside the State.

MALE CLINIC, BRISBANE.

During the period under review 602 new patients presented themselves for examination at the Departmental V.D. clinic, as against 570 for the previous year, and particulars regarding them are included in the summaries hereunder. The figures represent, as shown, an increase of 32 persons.

DIAGNOSIS OF CASES.

Conditions other than venereal or undiagnosed	285
Gonorrhœa	268
Syphilis, primary	23
Syphilis, secondary	22
Gonorrhœa and Syphilis	2
Soft Chancre	1
Gonorrhœa and Secondary Syphilis	1
	317
	602

As in the previous year's report, only approximately 50 per cent. of the newcomers were sufferers from venereal disease.

At 30th June, 1927, there were 333 patients on the clinic records as against 391 at the beginning of the fiscal year, *vide* statement hereunder:—

Summary.

	Cases.
Gonorrhœa	163
Syphilis	27
Syphilis (secondary)	31
Gonorrhœa and Syphilis	7
Gonorrhœa and Secondary Syphilis	1
Conditions other than Venereal or undiagnosed	104
	333

Comparative Statement of New Patients and Notified cases from Male Clinic, Brisbane, during past Four Years.

Disease.	CASES.							
	1923-1924.		1924-1925.		1925-1926.		1926-1927.	
	—	Notified.	—	Notified.	—	Notified.	—	Notified.
Gonorrhœa .. ..	..	269	..	235	..	265	..	268
Syphilis, Primary .. ..	..	22	..	12	..	11	..	23
Syphilis, Secondary .. ..	..	7	..	17	..	10	..	22
Gonorrhœa and Syphilis .. ..	..	2	..	2	..	2	..	2
Gonorrhœa and Secondary Syphilis .. ..	..	..	..	1	..	..	..	1
Soft Chancre .. ..	..	1	..	1	..	3	..	1
Conditions other than venereal	282	..	306	..	279	..	285	..
Totals	282	301	306	268	279	291	285	317
New cases thus—	583		574		570		602	

Summary of Male Clinic Operations, Brisbane.

Consultations	7,513
Average consultations per diem	30
New cases notified	317
New cases—conditions other than Venereal	285
Blood specimens taken (Wassermann) ..	273
Novarsenobillon and Neosalvarsan administered	358
Trepol administered	76
Muthanol administered	283
Gonococcal vaccine administered	321
Smears taken	2,085
Prostatic massages	5,991
Irrigations	40,177
Certificates of cure or apparently free from disease issued	218
Prescriptions dispensed at Departmental Dispensary	3,012

DEFAULTERS.

During the year 309 defaulters in treatment at the Male Clinic were notified; 209 were written to, of whom 89 called back; the police were asked to locate if possible and warn of their responsibilities 220, and including 2 outstanding replies at date of last report police advices show:—

Warned	119
No trace of	74
Left Queensland	22
In Gaol	4
Replies outstanding at 30th June, 1927 ..	3

Total 222

During the period under review seventy-six (76) women made application for free treatment in Brisbane, and as a result of examination it was ascertained that twenty-one (21) were suffering from gonorrhœa, two (2) from syphilis, and fifty-three (53) from conditions other than venereal disease.

EXAMINATION AND TREATMENT OF PROSTITUTES.

William Street examination rooms ..	430
Smears submitted from examination rooms	1,290
Bloods (Wassermann reaction), examination rooms	5
Official notices (Form H) issued for ditto.	387

As a result of examination 44 prostitutes were detained in the Venereal Isolation Hospital, and another left by motor for New South Wales before she could be apprehended.

From the V.I. Hospital, 1,215 smears and a blood (Wassermann) were forwarded to the Department's Laboratory.

Summary re Treatment of Women.

Centre.	Number Remaining on 30th June, 1926.	Admitted During Period.	Discharged During Period.	Remaining at 30th June, 1927.
Ayr	1	..	1	..
Brisbane	7	67*	64	10
Cairns .. .. .	..	2	2	..
Ingham .. .. .	..	3	2	1
Longreach .. .. .	..	1	1	..
Rockhampton	1	†	..	..
Toowoomba .. .. .	..	11†	8	3
Townsville	3	6	9	..
Total	12	90	88	14

* Brisbane figures include 15 Rockhampton prostitutes, 2 prostitutes who absconded from Toowoomba after issue of order (Section 164 (2) of the Health Acts) and were apprehended in this city, 2 female prisoners (also prostitutes), 1 non-prostitute from Mount Morgan, and 3 Brisbane non-prostitutes.

† Fifteen Rockhampton women were transferred to V.I. Hospital and treated there, hence not included in total admissions and discharges shown above.

‡ Toowoomba figures do not include the two women who were treated in Brisbane as above.

Official Form F (Section 161 of "The Health Acts, 1900 to 1922) issued on persons to whom sufferers ascribed infection.

Metropolitan Area—Three issued, one on a male and two on females. Result: One female discovered to be suffering from venereal disease, one female and one male negative of venereal disease.

Outside Areas—Two issued, both on females. Result: One discovered to be suffering from venereal disease and one negative of venereal disease.

Official Form G (Regulation 9 of Venereal Diseases Regulations of 1923) issued on persons suspected to be suffering from venereal disease.

Metropolitan Area—One female suspect was served with form and ascertained to be negative of venereal disease, also three females and ninety-nine males who defaulted in attendance whilst under treatment for venereal disease. Result: All women and seventy-eight men reported back, five left district and could not be located, and papers forwarded to Crown Law Department for prosecution of sixteen.

Outside Areas—Two females suspected were served with form and one found to be suffering from venereal disease and one negative of same. One Townsville male clinic patient who defaulted in attendance was served with form and as he did not comply with its requirements was prosecuted.

PROSECUTIONS.

The Crown Law authorities were requested to take proceedings in the following cases at Brisbane, Cairns, Bundaberg, Ingham, Innisfail, Rockhampton, and Townsville:—

Regulation 10—	
Failure by prostitute to report for medical examination, 59, and 1 pending at 30th June, 1927	60
Regulation 9—	
Failure to comply with official notice issued by Commissioner of Public Health	17
Regulation 14 (i.)—	
Handling foodstuffs whilst suffering from venereal disease	2
Section 162 (3)—	
Failure to report for treatment within prescribed periods, 11 (one pending last year)	11
Section 168 (i.) (4)—	
Occupies or resides in a house frequented by prostitutes	6
Total	96

Of the above the following number were withdrawn:—Regulation 10, 26; Regulation 9, 5; Section 162 (3), 5; Regulation 14 (lost through a technicality), 1.

DEFAULTERS (Section 162 (3), Health Acts, 1900-1922).

Defaulters other than Brisbane Male Clinic.	
Total number	149
Number written to	89
Number reported back accordingly (1 outstanding 30th June, 1927)	9
Number to police to locate and warn	139

Result Police Action.

Outstanding last report, 23. Results—4 warned, 9 got certificates of cure, 7 had left district and not located, and no trace found of 3.	
Warned	47
Certificates of cure got by	15
No trace of	45
Left district	19
In gaol	1
Outstanding (pending 30th June, 1927)	12
	139

Summary of Police Action re Defaulters.

Male clinic cases (Brisbane)	222
Other cases (whole state)	162
	384

Results—	
Warned	170
Certificates of cure obtained by	24
In gaol	5
Left district	48
No trace of	122
Inquiries not completed at 30th June, 1927	15
Total	384

Certificates of Cure or Apparently Free from Disease Received.

BRISBANE AREA.

	Gonorrhœa.		Syphilis.		S. Syphilis.		Gonorrhœa and Syphilis.		Soft Chancre.		Ulcerative Granuloma.		Total Sexes.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Private doctors	240	19	17	1	..	..	..	..	..	..	..	..	257	20
Male Clinic ..	192	..	14	..	12	..	1	..	..	..	..	..	219	..
V. I. Hospital ..	..	58	..	..	..	..	..	..	..	..	..	..	..	58
Other hospitals	..	11	1	..	..	..	..	..	..	..	..	..	1	11
Department female cases ..	..	5	..	..	..	..	..	..	..	..	..	..	..	5
Prisons ..	6	..	..	1	..	..	..	..	..	..	..	..	6	1
Total ..	438	93	32	2	12	..	1	..	..	..	..	..	483	95

OUTSIDE AREAS.

	Gonorrhœa.		Syphilis.		S. Syphilis.		Gonorrhœa and Syphilis.		Soft Chancre.		Ulcerative Granuloma.		Total Sexes.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Private doctors	146	3	4	..	..	..	..	..	1	..	..	..	151	3
Hospitals ..	129	28	5	2	3	1	..	..	..	..	5	7	142	38
Prisons ..	2	..	..	..	..	..	..	..	..	..	..	..	2	..
Total ..	277	31	9	2	3	1	..	..	1	..	5	7	295	41
Grand Total for State ..	715	124	41	4	15	1	1	..	1	..	5	7	778	136	
														914	

N.B.—*Re* Certificates of Cure from Venereal Isolation Hospital, Brisbane, 58 were issued, whilst no certificate was issuable regarding 4 women who were not gonorrhœal but from whom specimens had shown over 50 per cent. polymorphonuclear leucocytes, one was released under exceptional circumstances to private treatment, and one was transferred to the Brisbane Hospital for further treatment and release, making a total of 64 discharges.

Prisoners detained under Section 164 (2) (c) of "The Health Acts, 1900 to 1922."

Thirteen (13) male and three (3) female prisoners were detained in the Metropolitan area during the year, and four (4) males at centres outside the metropolis.

Of these twelve were gonorrhœal (all males), one syphilitic (female), and specimens from the remaining seven gave over 50 per cent. polymorphonuclear leucocytes results, and for the purposes of the subsection above stated were considered to be suffering from venereal disease.

SUMMARY.

Centre.							Number remaining on 30th June, 1926.	Admitted during period.	Discharged during period.	Remaining on 30th June, 1927.
Brisbane	..	..	..	..	..	..	1 male 1 female	13 males 3 females	12 males 4 females	2 males
Mackay ..	..	..	..	..	..	..	Nil	1 male	1 male	Nil
Townsville	..	..	..	..	..	..	1 male	3 males	4 males	Nil
Totals	..	..	..	..	..	..	2 males 1 female	17 males 3 females	17 males 4 females	2 males

FOOD HANDLERS.

Action was again taken to ensure the due observance of Regulation 14 (1) of "The Venereal Diseases Regulations of 1923," which reads as follows:—"Any person suffering from venereal disease who carries, delivers, manufactures, prepares, or otherwise handles any food intended for consumption by any other person shall be guilty of an offence against these Regulations."

In all eleven (11) cases were investigated, with the following results:—

Occupation.	Nature of Disease.		Result of Departmental Action.
Milkman ..	Syphilis	..	Discontinued calling
Waitress ..	Gonorrhœa	..	Discontinued calling
Butcher ..	Gonorrhœa	..	Discontinued calling
Waffle maker ..	Syphilis	..	Prosecution failed on technicality, discontinued calling, however
Pastrycook ..	Gonorrhœa	..	Discontinued calling
Ice carter ..	Gonorrhœa	..	Discontinued calling
Butcher ..	Gonorrhœa	..	Fined and discontinued calling
Cook ..	Gonorrhœa	..	Left the district and not located
Cook's offsider ..	Gonorrhœa	..	Discontinued calling
Baker ..	Gonorrhœa	..	Unemployed when inquiries made
Barmaid ..	Syphilis	..	Discontinued calling

The centres for the examination of prostitutes are Ayr, Bowen, Brisbane, Bundaberg, Cairns, Charters Towers, Cloncurry, Ingham, Innisfail, Longreach, Mackay, Mossman, Rockhampton, Toowoomba, and Townsville, and clinics for male and female patients are held at all but Bowen, Cloncurry, Longreach, and Mossman.

SANITATION.

The report of the Chief Sanitary Inspector, as submitted hereafter, in which is detailed particulars of the work dealing with sanitation carried out by his officers throughout the State, demonstrates the fact that much valuable advice has been rendered by the Department's officers to Local Authorities as well as ensuring that they in their turn are paying adequate attention to the numerous sanitary requirements of their respective areas.

The pioneering work which was carried out over the whole State by the inspectors of the State Health Department is now being brought to a successful issue by the appointment of certificated men as Local Authorities' inspectors. Prior to these appointments the State inspectors when on tour carried out many of the duties which should have been performed by the Local Authorities; thus the way has been well prepared for the advent of the local inspectors, who

can now carry out and give much closer attention and supervision to all matters relating to the sanitation of their districts than was given by the State inspector on his periodical visit. The appointment of local inspectors means stricter supervision and regular inspection, which must result in the health conditions of the State maintaining an upward trend.

Consideration was given to the finances of the various Local Authorities in the appointments made, for in many cases these officers were appointed as inspectors for contiguous areas which could be covered by railway or motor, which latter means of transport was provided by the officer as one of the conditions of the appointment.

In December of last year the inspectors of this Department were appointed Licensing Inspectors for the special purpose of inspecting and reporting on all rooms proposed to be used as sleeping rooms and all sanitary conveniences of licensed premises. As a result of these appointments inspectors were detailed to visit the hotels in the Brisbane area in conjunction with the Police and instructed to submit their requirements in time for the annual sittings of the Licensing Court.

The inspections were strictly carried out and included all bedrooms, bedclothes, furniture, sinks, slop sinks, wash tubs, drainage, septic tanks, and other fitments. Licensees were notified to remedy all defects, which have been effected in a satisfactory manner and without trouble.

In many of the hotels the urinal accommodation is of a very poor standard, and alterations, calling for the highest class of urinal fittings, have been requested. The requirement in this connection is the white enamel fireclay stall urinal (in ranges) provided with automatic flush tanks.

Special attention was paid to the condition of beds and bedding and to the presence of vermin. In only a few hotels was the presence of vermin observed. The renewal of bed and bedding was ordered where such was considered necessary; in two instances the licensee was required to refurnish all the sleeping rooms.

When the proposed Regulations governing the conduct of licensed premises become law a higher standard than has hitherto been the case will be enforced at all hotels which do not comply with the requirements set down in such Regulations.

It is pleasing to record that the provisions of the Sanitary Conveniences and Nightsoil Disposal Regulations are being very closely adhered to, as on follow-up visits by our officers improvements in this respect are recorded.

Seaside Resorts.—Most of the popular seaside and other holiday resorts throughout the State have been visited from time to time. Special inspections prior to the holiday seasons have also been made. Reports by the visiting

inspectors indicate that the public are now being better catered for in the matter of sanitary and other conveniences than heretofore. The work of many of the local inspectors has been very satisfactory in this respect, and as a result additional and improved accommodation with greater cleanliness and comfort now exist at these places.

The services of the sanitary staff have been widely availed of by Local Authorities at some of the larger towns who have no sewerage systems in vogue.

Owing to the amount of travelling required and consequent loss of time and expense in visiting the outside areas of the State, a further decentralisation of this Department was considered advisable. Accordingly a branch office was opened at Cloncurry and Charleville in the Western area and Mackay in the North, a resident inspector being transferred from Brisbane to the places mentioned.

The pollution of watercourses by trade wastes still continues, as well as nuisances from street water channels, and this will entail heavy expense to rectify; consequently the present conditions may have to be accepted by requiring that only active nuisances be dealt with as far as practicable.

The Chief Sanitary Inspector has furnished the following report of the work carried out by his staff for the past year:—

REPORT OF CHIEF SANITARY INSPECTOR.

SIR,—Herewith I have to submit a review of the work accomplished by the staff under my direction for the year ending 30th June, 1927.

In matters pertaining to sanitary administration and practice the year has been one of steady progress throughout the State. It cannot be said that the standard aimed at has been reached, but the movement in this direction is upward, and points to the fact that the necessity for clean and healthy conditions is being more fully realised by the citizens of the State.

SANITARY CONTRACTS.

All Local Authorities within the State are required by Regulation to submit the contracts for the removal of nightsoil and refuse before the contract is finalised.

Contracts were submitted by the following Councils and approved of by the Commissioner:—Clifton (Clifton Shire); Cambooya, Greenmount (Cambooya Shire); Landsborough, Maleny, Beerwah, Glasshouse Mountains (Landsborough Shire); Gracemere (Fitzroy Shire); Alpha, Jericho (Jericho Shire); Nambour, Woombye, Palmwoods (Maroochy Shire); Port Douglas, Mossman (Douglas Shire); Tiaro, Mount Bauple (Tiaro Shire); Yangan (Glenallan Shire); Wondai (Wondai Shire); Mundubbera (Mundubbera Shire); Cloncurry (Cloncurry Shire); Harrisville (Normanby Shire); Woodford, D'Agnilar (Caboolture Shire); Gladstone (Gladstone Town).

BY-LAWS.

By-laws for the following Shires were submitted for approval:—Mirani, Mackinlay, Eacham, Jericho, Cairns, and Wyangarie.

DISINFECTING APPARATUS.

Pressure spray pumps for disinfection operations were selected and despatched at the request of the following Councils, consequent upon a recommendation from this Department regarding same:—Blackall, Cardwell, Paroo, Caboolture, and Barcaldine.

Alformant lamps were ordered for Blackall and Maryborough.

Disinfectants were ordered for Blackall and Innisfail.

SANITARY WAGONS.

Sanitary wagons to the instructions and under the supervision of the Department's officers were built and forwarded to the Proserpine Shire Council and the Barambah Aboriginal Settlement.

FLYPROOF CABINET PANSTEADS.

Cabinet pansteads have been ordered at the request of the Councils and private firms for the undermentioned places (these cabinets are inspected, passed, and stamped before being forwarded) :—Cooktown, Charters Towers, Cambooya, Cleveland, Port Douglas, Goondiwindi, Greenmount, Greymare, Highfields, Inglewood, Johnstone, Killarney, Kilcoy, Nambour, Strathpine, Proserpine, Roma, St. George, Stanthorpe, Warwick, and Balonne Shire Councils. The total number of cabinets forwarded was two hundred and fifty. This figure does not represent the total number of cabinets which have been installed throughout the State, but only those ordered through the Department. In most towns and townships the cabinets are being locally manufactured, and the total figure is not available.

RAT INFESTATION.

Details of the work performed by the Department's rat gang are as follows:—

—	Lb.	Lb.
Poison—		
Poison manufactured	975	..
Poison sold to Local Authorities ..	..	434
Poison sold to public .. ..	..	203
Poison used for making baits .. ..	..	238
Poison in stock .. ..	..	100
		975
Baits—		
Number of baits sold to public ..	..	20,350
Number of baits sold to others outside of Brisbane area ..	..	1,657
		22,007

Number of 4-lb. loaves used, 650.

Number of Baits laid by Department's Gang.

River walls	389,950
Wharves	52,500
Railway premises	104,400
Government buildings	43,500
Meatworks	39,250
Other premises	5,650
Total	635,250

Rodents.	Rats.	Mice.
No. of rodents caught by Department's gang and examined at Laboratory ..	1,714	52
No. of rodents caught by Brisbane City Council's gangs and examined at the Laboratory ..	36,422	1,752
Miscellaneous sources ..	69	2
Total number examined ..	38,205	1,806
Rodents not examined—		
Department's gang ..	592	..
Brisbane City Council's gang ..	3,683	188
Grand total	42,480	1,994

NIGHTSOIL DEPÔTS AND RUBBISH TIPS.

The sanitary depôts in and around the Brisbane area have been inspected from time to time during the year. The depôts and tips in all towns outside this area are also inspected. A special inspection was made of the Redbank depôt when the Council took over the services from the contractor.

The conditions found and reported upon did not reflect credit on the work of the contractor. The Council are now carrying on the work by day labour under the supervision and direction of their inspector, with the result that conditions have improved. The Council intend re-equipping the depôt with up-to-date appliances.

At Beenleigh the new sanitary depôt, for which the Council received a loan from the Treasury, has been equipped in accordance with the requirements of the Commissioner, and was inspected and approved by an officer of the Department, and is now in use.

LAZARET.

During the year an officer of the sanitary staff made several inspections of the Island with reference to sanitary conditions and improvements thereon. The Chief Sanitary Inspector inspected and reported on the necessary alterations for the betterment of the water supply.

INSPECTORIAL WORK.

General inspectorial work within the metropolitan area has been carried out, but not so extensively as in previous years, so as to do away with any overlapping in work with the Brisbane City Council's Health Department. This duty has been principally one of re-inspection to ascertain if nuisances coming within the cognisance of the Department have received attention by the city officials.

Particulars of these inspections and an analysis of same are as follows:—

Inspections—	
General inspections	1,043
Written complaints	137
Verbal complaints	42
	1,222
Reinspections	771
Official calls	264
	1,035
Grand Total	2,257

Analysis of Inspections—

Animals	3
Boarding-houses	12
Disinfections	6
Drainage	206
Dirty premises	16
Fly infestation	6
Infectious diseases	2
Low-lying swampy lands	21
Mosquito infestation	27
Manure accumulations	3
Noxious trades	12
Picture houses	19
Piggeries	13
Rubbish—	
Accumulations of	80
Tips	27
Destruction	5
Non-removal of	6
Rat infestation—	
Premises	44
Wharves	109
River walls	145
Meatworks	26
Rat-proofing work	13
Sanitary conveniences	141
Sanitary pans—	
Non-removal of	14
Leaky	6
Sanitary dépôts	22
Street water channels	14
Stagnant water, accumulations of	2
Sewers	17
Septic tanks	13
Streams, pollution of	5
Schools	36
Smoke nuisance	1
Wharves, general inspections	146
Water closet accommodation	4
Total	1,222

HOTELS.

Under the Liquor Act, 1912-26.

Number of inspections (Brisbane area) ..	97
Number of inspections (outside Brisbane area)	225
Total	322

VENEREAL DISEASE WORK.

Number of attendances at court ..	204
Number of official calls	265
	469

Inspector E. I. Buhot has carried out the duties in connection with prosecutions in the Metropolitan Area in respect to breaches of the Venereal Diseases clauses of the Health Acts.

DISINFECTIONS.

Seventy-four railway carriages used for the carrying of patients suffering from infectious diseases were thoroughly disinfected.

Two disinfections were performed for the Cleveland Shire Council in houses in which infectious diseases occurred.

The Kindergarten School, Morningside, and the State Home, Woolloowin, were also disinfected.

CYANIDING.

The following Government steamers were cyanided: — “Schnapper,” “Stingaree,” “Dolphin,” “Matthew Flinders.”

The nurses’ quarters at the Diamantina Hospital were also cyanided.

SANITARY SURVEY AND INSPECTORIAL WORK.

The operations of the inspectorial staff of the Department are State-wide, and journeys of considerable distance have to be travelled in the discharge of the various duties which come within the scope of the State inspectors’ duties.

The inspectors from the headquarters staff carried out survey work as outlined hereunder:—

Chief Sanitary Inspector (Mr. J. Simpson).

Esk, Gympie, Barambah, Murgon, Redland Bay, Peel Island, Coolangatta, Caboolture, Toowoomba, Mundubbera.

Inspector Dudley.

3rd May to 18th June, 1927.

Landsborough, Palmwoods, Woombye, Nambour, Yandina, Eumundi, Cooroy, Pomona, Tiaro, Mungar, Eidsvold, Mundubbera, Gayndah, Biggenden, Degilbo, Dallarnil, Cordalba, Childers, Isis Junction, Howard, Burrum, Torbanlea, Cooran, Tewantin, Palmwoods, Maroochydore.

Inspector McNeil.

6th October to 27th November, 1926.

Boonah, Dugandan, Kalbar, Harrisville, Fernvale, Lowood, Coominya, Esk, Toogoolawah, Moore, Linville, Benarkin, Blackbutt, Yarraman Creek, Nanango, Kingaroy, Coolabunia, Taabinga, Wooroolin, Wondai, Tingoorra, Murgon, Barambah, Goomeri, Kilkiwan, Woolooga, Theebine, Gundiah.

13th December to 17th December, 1926.

Maryborough, Bundaberg, and Gympie.

Inspector Wiseman.

14th March to 15th April, 1927.

Gympie, Maryborough, Bundaberg, Gin Gin, Mount Perry.

29th October to 10th November, 1926.

Barambah, typhoid fever outbreak.

Inspector Lowes.

20th October to 19th November, 1926.

Southport, Coolangatta, Burleigh, West Burleigh, Nerang, Oxenford, Coomera, Beenleigh, Yatala, Bethania, Waterford, Canungra, Tambourine, Tambourine Mountain, Logan, Beaudesert, Rathdowney, Lamington.

14th March to 2nd April, 1927.

Rosewood, Marburg, Calvert, Grandchester, Laidley, Gatton, Grantham, Forest Hill.

Special inspections were also made at Redcliffe, Goodna, Redbank, Bundamba, Dayboro, Gympie, Imbil, Gatton, and Ipswich.

These tours of inspection entail a great amount of detail work and inquiry into the administration of the Health Acts and all the Regulations thereunder.

The reports of the visiting State inspectors are very encouraging, and reveal the fact that the old insanitary habits and practices are fast

disappearing, and that modern methods of health administration and practice are being slowly but surely adopted.

Nightsoil and refuse removal services in nearly all the towns which have been subjected to a sanitary survey are provided with up-to-date equipment in the shape of well-constructed covered-in wagons and standard size sanitary pans, provided with air-tight lids. The dépôts are well equipped, and the rubbish tips are mostly conducted in accordance with the requirements of this Department.

In all the districts where a certificated inspector has been appointed these services are being constantly supervised, and the dépôts are regularly visited. The regulations dealing with closets, and especially the part dealing with the flyproof panstead, are being strictly enforced, and many of the townships are so far as closets are concerned 100 per cent. flyproof. Under the direction of these local inspectors mosquito proofing of rain water tanks and other sources of domestic water supply are being screened or protected against the domestic mosquito, the *Stegomyia fasciata*, the Yellow Fever and Dengue Fever disseminator. The notable decrease in this mosquito in a large number of areas has been specially mentioned in the State inspectors' reports.

The cleanliness of the majority of these towns visited has also been noted in these reports. A number of towns have inaugurated rubbish removal services and provided standard size bins, which have brought about a great improvement in the cleanliness of the towns.

Nuisances, resulting from the absence of proper drainage facilities, are the outstanding causes of complaints in almost every area. Many drainage problems have been submitted to the Department for solution; advice and suggestions, along with specifications and plans and recommendations, have been sent in reply. The absence of finance is the deterrent in this matter. Local Authorities have no money available for extensive schemes of sewerage and drainage, but nevertheless a number of towns are making great advancement in this direction.

At Esk a special inspection was made of the hospital drainage system and the method of disposal, and suggestions were offered for improvements.

An inspection of the main sewer at Gympie was made, and a report on the condition and advice on the construction was tendered.

An outbreak of typhoid fever at the Aboriginal Settlement, Barambah, necessitated the presence of an officer, who was stationed there from the 29th October to the 10th November, 1926. A complete sanitary survey of the settlement was made by the Chief Sanitary Inspector in regard to nightsoil, refuse, and drainage collection and disposal. Some improvements, including a new sanitary wagon, have been effected.

A complete drainage scheme was designed and plans and specifications prepared and forwarded to the Chief Protector. The Government has sanctioned the expenditure of over £300 for the construction of the system.

When these alterations and additions are completed the Barambah Settlement will compare far more than favourably with the sanitary conditions of many of our towns.

A visit to Redland Bay and its environs consisted of a survey and inquiry into existing conditions.

The water supply of Peel Island was investigated, and as a result improvements have been carried out.

A visit to Coolangatta was made for the purpose of clearing up a misunderstanding that had arisen over the sanitary dépôt which had been selected at Tugun. The matter has now been settled.

The drainage system of Caboolture was inspected and reported on.

At Toowoomba an inspection of the abandoned site of the refuse destructor was made and recommendations submitted for improvement.

At Mundubbera a new sanitary dépôt was selected and matters pertaining to sanitary executive were subjected to inquiry.

DISTRICT OFFICERS.

TOOWOOMBA AND DISTRICT.

Inspector Sanderson.

The officer in charge of Toowoomba and district visited the following towns and townships and investigated the sanitary conditions of each one:—

Drayton, Southbrook, Pittsworth, Brookstead, Milmerran, Leyburn, Karara, Greymare, Pratten, Killarney, Tannymorel, Danderoo, Emu Valley, Yangan, Mount Sturt, Freestone, Maryvale, Gladfield, Goomburra, Hendra, Allora, Warwick (twice visited), Sandy Creek, Kingsthorpe, Oakey, Ackland, Muldu, Balgowan, Kulpi, Peranga, Cooyar, Watul, MacLagan, Quinalow, Kainkillenbun, Bell, Jandowae, McAllister, Warra, Kogan, Tara, Dalby, Nobby, Greenmount, Greenmount East, Cambooya, Oakey, Rangeview.

Miles travelled—Train, 232; motor car, 1355; total, 1,587.

The following is an analysis of the inspections carried out:—

Animals	..	..	..	..	..	22
Camps	..	..	..	..	..	21
Disinfections	..	..	..	..	..	2
Drainage	..	..	..	..	..	115
Dirty premises	..	..	..	..	..	16
Infectious diseases	..	..	..	..	..	27
Mosquito infestation	..	..	..	..	..	201
Manure accumulation	..	..	..	..	..	19
Piggeries	..	..	..	..	..	17
Rubbish accumulations	..	..	..	..	..	31
Rubbish tips and dépôts	..	..	..	..	..	47
Rat infestation	..	..	..	..	..	29
Sanitary conveniences	..	..	..	..	..	450
Sanitary pans—						
Leaky	..	..	..	..	..	20
Non-removal	..	..	..	..	..	5
Sanitary dépôts	..	..	..	..	..	19
Street watertables	..	..	..	..	..	111
Sewers	..	..	..	..	..	39
Septic tanks	..	..	..	..	..	10
Stables	..	..	..	..	..	25
Slaughter yards	..	..	..	..	..	7
Schools	..	..	..	..	..	15
Watercourses, <i>re</i> pollution	..	..	..	..	..	7
Liquor Act inspections	..	..	..	..	..	106
Total	..	..	..	..	..	1,361

The officer of this district reports that the year has been free from any abnormal incident. In most cases inspections revealed a steady improvement in sanitary economy and a more favourable reception of the recommendations made to the Local Authorities by the Department.

Marked improvements have taken place at most of the sanitary depôts and the operations of the services are carried out in a satisfactory manner.

The non-flyproof closet and cesspit have practically disappeared and the modern flyproof cabinet panstead and flyproof cesspit have taken their places.

Drainage from hotels and other business premises in country townships continues to be a source of trouble, owing to the lack of drainage facilities.

The Toowoomba sewerage scheme is operating successfully, and the receiving station, where pan contents are discharged into the main sewer, is being worked without causing a nuisance or giving rise to complaint.

An invasion of mosquitoes was experienced during last summer in Toowoomba, and this Council, which has always prided itself on having a mosquito-free city, soon had the situation under control by the appointment of a special staff of inspectors.

ROCKHAMPTON AND DISTRICT.

Inspector Butts.

The inspector in charge of the Central District reports that, apart from the outbreak of diphtheria (22 cases) at Rubyvale, the year has passed without any serious trouble.

Three hundred and ten cases of infectious disease have been reported as against 210 for the previous year. Included in this number, 22 cases were reported from the Mackay district, and 17 from Bundaberg.

Two cases of leprosy were reported, and all the necessary arrangements for transferring the patients were made, and their places of residence thoroughly disinfected.

The sewage and drainage methods of Rockhampton are still most unsatisfactory, and give rise to numerous complaints and nuisances. An improvement to a limited extent has taken place in this regard, but is very far short of what requires to be done. A comprehensive sewerage system is necessary for this city.

The sanitary removal services are being carried out in a satisfactory manner at the Lion Creek depôt.

Owing to the presence of *B. leprae* in rats, a special rat campaign was carried out, and for this purpose Foreman Lambert of the Department's rat gang was deputed to control the operations of the Council's gang. A special report on the rat question and the necessity for the thorough rat-proofing of infested premises was submitted to the Council for action.

The following towns in the Central district were visited during the year, and in most cases favourable reports on the sanitary conditions

were submitted to the Commissioner by the visiting inspector:—

At Tambo, the old cesspit system of nightsoil disposal has been abandoned, and an up-to-date duplicate pan removal service instituted. Advance has also been made in other health matters.

At Longreach, the sewerage system, for which the Council received a loan of £14,255 from the Treasury, is now well on its way towards completion.

Up-to-date improvements to the plant and workmanship at the sanitary depôts in Blair Athol and Ilfracombe respectively have been carried out.

The sanitary depôt and other matters at Emerald were found to be very unsatisfactory, and the Council were called upon to give stricter attention to their duties under the Health Act and Regulations.

A sanitary removal service for the town of Gracemere has been inaugurated by the Fitzroy Shire Council.

Health conditions within the Livingstone Shire area are reported to be of a high standard.

The following is a list of the towns inspected:—Westwood, Yeppoon (3), Emu Park (2), Mount Morgan (3), Kabra, Marmor, Raglan, Mount Larcom, Gladstone, Miriam Vale, Avondale, Rosedale, Murray Creek, Boreen, Bajool, Sandhills, Hartley, Emerald, Muttaborra, Longreach, Ilfracombe, Barcaldine, Aramac, Jericho, Blackall, Isisford, Tambo, Alpha, Bogantungan, Rubyvale, Sapphire Town, Anakie, Blair Athol, Clermont, Capella, Springsure, Comet, Blackwater, Bluff, Dingo, Duaringa.

Miles travelled.—Train, 2,100 miles; motor car, &c., 777 miles; motor cycle, 60 miles; total, 2,937 miles.

<i>Inspections.</i>					
General	..	..	..	..	1,029
Written complaints	..	..	..	..	3
Verbal complaints	..	..	..	..	42
					—
Reinspections	..	..	..	..	1,074
Official calls	..	..	..	..	183
					48
					—
					1,305
Animals	..	..	..	..	36
Camps	..	..	..	..	2
Disinfection	..	..	..	..	48
Drainage	..	..	..	..	129
Dirty premises	..	..	..	..	41
Infectious diseases	..	..	..	..	88
Low-lying and swampy land	..	..	..	..	6
Mosquito infestation	..	..	..	..	49
Meatworks	..	..	..	..	10
Manure, accumulations of	..	..	..	..	18
Piggeries	..	..	..	..	18
Rubbish accumulations	..	..	..	..	30
Rubbish tips	..	..	..	..	56
Rubbish non-removal	..	..	..	..	27
Rat infestation	..	..	..	..	29
Sanitary conveniences	..	..	..	..	189
Sanitary conveniences, new	..	..	..	..	69
Sanitary pans—					
Non-removal	..	..	..	..	6
Leaky	..	..	..	..	8
Sanitary depôts	..	..	..	..	37
Street water channels	..	..	..	..	52
Stagnant water	..	..	..	..	22
Slaughter-yards	..	..	..	..	18
Septic tanks	..	..	..	..	9
Sewers	..	..	..	..	16
Sanitary conveniences defective	..	..	..	..	18
Schools	..	..	..	..	24
Cattle yards	..	..	..	..	9
Wharves	..	..	..	..	10
					—
Total	..	..	..	..	1,074

MACKAY AND DISTRICT.

Inspector Mason.

The officer who has been stationed in charge of this district for the past seven months reports that his work has been primarily of an observatory nature, and with regard to the areas of his district visited, he states that they compare very favourably with other portions of Queensland.

Cases of infectious diseases have occurred, but have never been epidemic in extent.

With the exception of Sarina, the nightsoil and refuse removal services are being operated in a sanitary manner, and the country towns generally can be designated "clean."

In the City of Mackay, the excellent water supply is being improved in volume. Street water-channels and other drainage arrangements are being constructed as funds allow. The road to the depôt, which has been in a state of repair for some time, is now being put into good order and condition.

Rat infestation is slight and their numbers are being kept down by the ratman employed by the Council.

The mosquito regulations have not yet been enforced.

A most remarkable feature of the whole district is the absence of flies in any number, due no doubt to the large number of motor cars, the lessened number of horses, with the natural consequence of very few manure accumulations. In the vicinity of the sugar mills, however, flies are prevalent, due to the disposal of waste molasses on the land, but these have been localised. The erection of a distillery at Sarina will probably absorb all the surplus molasses and eliminate the necessity for land disposal.

The following towns were inspected and reported on:—Sarina, Koumala, Farleigh, Koligo, Bloomsbury, Proserpine, Walkerston, Mirani, Gargett, Finch Hatton, Netherdale.

Miles travelled by rail, 232.

The inspections carried out are summarised as follows:—

Drainage	40
Disinfections	2
Low-lying grounds	3
Mosquito	20
Rubbish—	
Accumulation of	6
Non-removal of	10
Rubbish tips and depôts	8
Rat infestation	6
Rat-proofing wharves	2
Sanitary conveniences	78
Sanitary conveniences, sites for	5
Sanitary depôts	8
Street water channels	5
Stagnant water	5
Sewers	2
Septic tanks	8
Stables	2
Streams and watercourses	10
Streams and watercourses, pollution of	4
Hotels (under Liquor Act)	98
Total	322

TOWNSVILLE DISTRICT.

Inspector Whitford.

In the course of his duties the officer in charge of this area has made the following inspections:—

General inspections	1,194
Written complaints	16
Verbal complaints	64
	1,274
Reinspections	374
Official calls	180
	554
Total	1,828

The following towns were inspected, and all matters pertaining to sanitation were investigated:—Proserpine, Ravenswood Junction, Homestead, Pentland, Winton, Corfield, Hughenden, Prairie, Torren's Creek.

Miles covered by rail, 1,248.

In Townsville 82 cases of diphtheria, 12 cases of typhoid, and 6 cases of scarlet fever were reported.

Assistance was rendered to Dr. St. V. Welch, Medical Officer, Department of Public Instruction, when he carried out a swabbing campaign of all schools during the month of September. About 5,000 scholars and teachers were swabbed, and as a result 3 per cent. were found to be "carriers." House isolation was carried out, and the Diphtheria Regulations strictly enforced.

In the centres where qualified local inspectors have been appointed, marked improvement in sanitary conditions generally was observed.

The Hughenden Town Council inaugurated a refuse removal service, but the standard size refuse bin has not yet been enforced. Until such is done the service cannot be said to be complete and up-to-date.

At Charters Towers the sanitary conditions of twenty-five dairies were inquired into. Two dairies were found to be of a very high standard, the others were clean, and fairly well kept. Numerous defects were noted for attention. The sanitary accommodation at six of the dairies consisted of cesspits, and in each case the owner was instructed to instal a pan closet in accordance with the Regulations.

The Townsville Local Authority has not yet taken any action in regard to the provision of standard refuse bins, nor the installation of fly-proof cabinets for all premises under its jurisdiction. Such inaction in this connection does not reflect to the credit of the Council, as such improvements as these are absolutely essential to a city such as Townsville.

CAIRNS AND DISTRICT.

Inspector Austin.

In reviewing his work for the year the inspector in charge of this Northern office states that the year has been one of steady progress in all the branches of the work. The disease incidence has been higher than in previous years, but was not confined to any particular locality or period, the cases occurring over the twelve months.

The Cairns Shire Council are erecting an incinerator at Babinda, and if this proves a success this method of disposal will also be established at Gordonvale, which will serve nearly all the populated areas at that end of the Shire.

The Tinaroo Shire have plans prepared for a comprehensive foul-water drainage scheme for the Town of Atherton.

In areas where there is a nightsoil removal service the flyproofing of closets is being enforced.

Inspection of hotels in Cairns and in all other centres visited have been carried out, under the provisions of “*The Liquor Act, 1912-26*,” and where alterations were found necessary notice was given, and in all cases same has been complied with.

The following is a list of the towns surveyed:—Kuranda (2), Edmonton (2), Hambleton, Babinda (3), Cooktown, Tully (2), Malanda, Stratford (2), Redlynch (3), Silkwood, Gordonvale, Aloomba, Fishery Creek, Mirriwinni, Pawngilly, Bartle Frere, Mountain View, Wooree, Double Island, Freshwater, Biboohra, Mareeba, Tolga, Atherton.

Miles travelled—Rail, 1,014; steamer, 200; motor car, 276; total, 1,490. In Cairns area by car, 1,190; total, 2,680.

Particulars of the inspectorial duties are as under:—

General inspections	2,688
Written complaints	7
Verbal complaints	21
	<hr/> 2,716
Reinspections	450
Official calls	2,700
	<hr/> 3,150
Total	5,866

Analysis of Inspections.

Animal, including poultry	150
Camps	6
Disinfections	5
Drains	35
Dirty premises	9
Infectious disease	10
Low-lying swampy land	17
Mosquito infestation	40
Meatworks	1
Fertilizer works	1
Manure accumulations	8
Piggeries	7
Accumulations of refuse	10
Rubbish tips and depôts	15
Destructor	1
Rat infestation, harbourage, &c. ..	280
Wharves	3
Sanitary—	
Conveniences	1,600
Conveniences, new	50
Sites	2
Depôts	8
Pans, non-removal	12
Pans, leaky	7
Water-tables	40
Stagnant water	20
Sewers	18
Septic tanks	30
Stables	295
Stream and watercourse pollution ..	10
Schools	25
Smoke nuisance	1
	<hr/>
Total	2,716

CLONCURRY AND DISTRICT.

Inspector Mitchell.

The officer in charge of this district summarises his work as follows:—During the five and a-half months that I have been stationed in the West, in addition to the periodical inspections of Cloncurry, I visited Dajarra, Duchess, Kuridala, Selwyn, Julia Creek, Richmond, Nonda, and Nelia for the purpose of carrying out inspection work.

With the exception of a few details which the various Councils have been asked to rectify, the removal and disposal of nightsoil is carried out in a satisfactory manner. Closets in the majority of these places are flyproof.

In Cloncurry and Kuridala this important work is being pushed forward, but at Dajarra and Nelia, where cesspits are in use, flies are very prevalent owing in large measure to these conveniences not being flyproof. The Councils have been instructed to give this matter their attention.

Where refuse removal services are in vogue, the Councils carry out the work, and the refuse is being used to fill in low-lying land, gullies, &c., other water-holding land, which is a much better practice than depositing it on the surface of reserves.

No serious outbreak of infectious disease has taken place, a few isolated cases of diphtheria were noticed and immediate steps were taken by the Councils concerned to check the spread of the disease. Swabbing was carried out at the Cloncurry School and the R.C. Convent School, and these premises disinfected.

CHARLEVILLE AND DISTRICT.

Inspector Beaver.

The officer in charge of this district has furnished the following particulars in respect to the work carried out by him:—

Drainage.—From a sanitary standpoint the outstanding feature on my arrival was the Bradly Gully nuisance. This has been met by the construction of a sewer to connect up with the main drainage areas of the town. This sewer, which is now nearing completion, will effect a wonderful improvement. Considerable improvement has also been made in private drainage, especially at hotels.

Sanitary Works.—The sanitary contractor is carrying out this work satisfactorily.

Water Supply.—An excellent bore supply.

Mosquito Regulations.—Nothing in this regard has been done with the exception of an occasional spraying of Bradly Gully by the Local Authority.

The matter of dealing with the mosquito pest in Charleville will be a simple one. A new joint Local Authorities Health Inspector has been appointed, and with his advent I anticipate being in a position very shortly to be able to report Charleville "mosquito free." This also applies to a very large degree to other towns in the district.

Infectious Diseases.—The incidence has been very small. From November to 30th June the following notifications have been made from towns within the district:—

—	Typhoid.	Diphtheria.	T.B.
Charleville	2	3	..
Cunnamulla	1	..	..
Quilpie	2	..	..
Roma	2	1	1
Barambill (Mitchell)	1	..	..

This covers the summer months in a district stretching from Roma west to the New South Wales and South Australian borders.

Foods.—Very marked improvements have been made in the handling of foodstuffs as compared with a few years ago.

Milk.—Sixteen samples of milk were taken in Charleville and submitted to the Government Analyst, seven of the first eight taken, although returning no added water, were deficient in butter fat. An exhaustive inquiry finally revealed the fact that the vendors were not adding the "strippings" to the milk, it was going to the calves. Upon this being rectified a subsequent analysis revealed satisfactory standard results.

The following towns were visited:—Muckadilla, Roma, Mitchell, Mungallala, Quilpie, Adavale, Toompine, Thargomindah, Eulo, Cunnamulla, Wyandra.

The distance travelled amounted to 1,062 miles.

JOHN SIMPSON,

Chief Sanitary Inspector.

FOOD AND DRUGS.

The work performed by the inspectorial staff in connection with Food and Drugs has been very complete, and in addition has been satisfactorily carried out, embracing as it has all descriptions of food and drugs on the market for public use.

The report of the Chief Food Inspector, as furnished hereafter, contains full details of the Department's activities in safeguarding the interests of public health in preventing the possible sophistication of foodstuffs, and in addition sight has not been lost of the necessity of carrying out complete bacteriological tests so as to secure the purity of milk supplies, including ice cream, &c.

At all the principal centres of population, where the licensing of milk vendors' premises as purveyors of milk comes under the direct

control of this Department, samples are periodically examined both for analytical and bacteriological purposes, with the result that a marked improvement of the milk supply has been obtained.

An interesting table (Table III.) is shown in the Government Analyst's report (page 34) in regard to the 941 legal samples examined by him.

Some 300 specimens of milks were submitted to the Laboratory for the tubercle bacillus; all were examined microscopically by smears from centrifuged deposit and two dozen guinea pigs inoculated, but in none of these was the bacillus found.

During inspection of cafés in the city it was considered advisable to check the contents of the soda-water fountains. Samples of the contents were submitted to the Government Analyst, who found lead in appreciable quantities in some of them. An interesting report on the matter is submitted by the Government Analyst (*vide* Table V. of his report). The defects have been remedied, but the matter will still be kept under supervision.

UNIFORM STANDARDS FOR FOOD AND DRUGS.

In May last, accompanied by the Government Analyst, I attended a Conference in Melbourne dealing with Food and Drugs, and as it was anticipated by me that this should be the final conference to recommend to the different States the vexed question of uniformity, and which had been asked for so frequently by the several trade representatives through the Chambers of Commerce, knowing from past experience the difficulties we had to encounter, I considered it expedient on this occasion to bring to the Conference a representative from the actual field of practice to point out his difficulties in administration unless he had the power as given to him by the Food and Drug Regulations in force in Queensland, consequently I was accompanied also by the Chief Food Inspector, Mr. Petherick.

As a result of the deliberations almost complete harmony of agreement was reached, and it is anticipated that printed copies of the Conference's recommendations will at a very early date be presented to the Governments concerned for acceptance.

Upon the question of the use of chemical preservatives in foods it is interesting to record that the Conference followed closely the recommendations of the recent British Departmental Committee on the use of preservatives and colouring matters in foods, and decided to recommend the elimination from the standard of salicylic acid and boric acid as food preservatives, and to substitute benzoic acid or the benzoates, thus leaving as preservative substances for use in certain specified foods sulphur dioxide (or sulphites calculated as sulphur dioxide) and benzoic acid and benzoates, which are the two substances now accepted for such purpose by the Home Authorities after extensive investigation.

In such connection, the Conference unanimously passed a resolution—that the use of boric

acid, or of any other boron compound, as a preservative substance, should be prohibited after the 1st July, 1928.

Amongst other items of importance discussed by the Conference was that of the artificial bleaching of flour, and a resolution was passed that the attention of the State Governments be drawn to this increasing practice, which in its opinion interferes with the nutritional value of the flour and serves no useful hygienic purpose. The Conference recommended that a regulation prohibiting the artificial bleaching of flour be enforced simultaneously in each State. This would not interfere with trade interests and would put an end to a definite deterioration of the staple food of the people.

Other subjects of importance discussed and dealt with by the Conference included standards for infants' foods and for medicated wines, the labelling of biological products, and the matter of requiring patent and proprietary medicines to bear upon the label a statement of the principal ingredients therein for which therapeutic properties are claimed, and in the case of medicines intended for internal use the measure, number, quantity, volume, or weight of such ingredients contained in the dose recommended for an adult.

PAINT SPRAYING.

Arising out of a deputation representing the Australian Coachmakers Employees' Federation and the House Painters' Union, which waited upon the Minister with reference to the question of the use of the spray "gun" in the application of paints and the toxicity of the substances employed in such processes, samples of all "spray paints" in use upon the local market at the present time were procured and submitted to the Government Analyst for examination. The analyses of these paints are not yet completed, but a report concerning same is expected at an early date.

As the secretaries of the abovementioned Unions expressed apprehension concerning the effect of such paints upon the health of those using same in their daily work, more particularly those engaged in the motor-painting industry, communication was had with the Commonwealth Department of Health (Division of Industrial Hygiene), the Director of which replied as follows:—

"The question of the use of sprays in the application of paints has been under careful consideration by my Division for some time past. All the solvents mentioned in your letter may cause symptoms of discomfort, such as headache, smarting of the eyes, burning of the throat, &c., in workers when they are first exposed, but later tolerance is established and no ill-effects noted.

"From inquiries made in the different States little or no trouble seems to have arisen from the use of these solvents by the spray gun, but the dangers of wood alcohol and benzol must be emphasised."

The solvents mentioned in our letter to the Commonwealth Director of Health were—Amyl acetate, Ethyl acetate, Acetone oil, Methyl acetone, Wood alcohol, Ether and denatured alcohol (mixed), Ethyl acetate. Non-solvents—Benzol, Benzine.

At the Third Conference on Industrial Hygiene, held in Melbourne in May last, the question of painting by means of the spray gun was discussed, and a resolution as follows recorded:—

"This Conference after consideration of the recommendations made by the special Committee to the Australian Commonwealth Engineering Standards Association, approved of the principles contained therein and recommended them to the Departments concerned."

The special Committee above referred to (Paint and Varnish Sectional Committee) submitted, *inter alia*, the following recommendations relating to spray painting:—

(a) Lead paint should not be used in interior painting. The use of lead paints in spray-painting under any circumstances must be regarded as dangerous, and the use of non-lead paints should always receive consideration.

(b) Commercial spray painting in interiors should be done in properly constructed booths, provided with efficient mechanical exhaust ventilation. The exhaust systems should be so constructed and installed as to operate effectively, independent of weather and adjacent building conditions.

(c) The booths act as extraction-dust ventilating units, and the spray operator should not be exposed to dust and fumes drawn past him to the exhaust fan.

(d) The exhaust system should produce a satisfactory uniform air movement at the booth face under working conditions.

It is recommended also that employees engaged in spray-painting should—

(a) not spray at right angles to a flat surface, so causing the spray to roll back,

(b) not spray too large objects and thus get out of range of the exhaust,

(c) not spray promiscuously about the room in testing the sprayer.

In the matter of safeguards regarding volatile solvents, &c., the Special Committee recommended that paints, &c., containing benzol should not be used nor should benzol as such be added to any paint material.

Where penetrating stains and removers containing benzol are used, as many men as practicable should be employed to minimise the period of exposure to the injurious effects of benzol.

Shellac dissolved in wood alcohol should not be used nor should wood alcohol as such be used in any painting operation.

POISONS REGULATIONS.

The provisions of the Poisons Regulations dealing with the sale and use of Cyanide of Potassium and poisonous compounds of cyanogen have been rigidly administered and written orders from a police officer insisted upon from all persons desirous of purchasing or obtaining same. The application of this regulation must have proved of considerable use in preventing the illegal destruction of native bears and of opossums by means of poison baits, as well as in preventing accidents to stock.

The application of the provisions of the Poisons Regulations relating to the presentation of fictitious prescriptions to chemists has been of extreme value in placing a check upon the transactions of certain drug addicts, who apparently stop at nothing in order to obtain their favourite "dope."

Several of these bogus prescriptions have been retained unfilled by chemists during the year, and one individual was prosecuted and convicted for presenting such a scrip to a chemist for making up.

The Chief Food Inspector (Foods and Drugs) reports as follows on the work of his division for the fiscal year under review:—

Staff.—The principal items of interest during the year in connection with the personnel of this division were the resignation of Inspector J. C. Philp and the transfer from Brisbane of Inspector C. W. Beaver to Charleville, Inspector A. E. L. Mason to Mackay, and Inspector C. Mitchell to Cloncurry, at which town new sub-offices were opened by the Department.

In addition to these centres, control over other outlying areas has been maintained by the officers in charge of sub-offices at Cairns, Townsville, Rockhampton, and Toowoomba, and also by tours of inspection performed by officers of headquarters staff in the remaining portions of the State.

Headquarters (Brisbane).—The work of headquarters staff of this division has consisted as heretofore in the enforcement of Part VI. of the Health Acts (Pure Food and Drugs), the Food and Drug Regulations, the Fish Supply Regulations, and the Poisons Regulations, as well as performing sanitary inspections as occasion has required.

In such connection the duties of the said officers have been performed in the Brisbane Metropolitan Area (Greater Brisbane) and the following outside cities and towns on the dates set forth hereunder:—

1926.—9th to 28th July.—Inspector J. C. Philp.—Cunnamulla, Roma, Wallumbilla, Chinchilla, Columboola, Drillham, Dulacca, Charleville.

1926.—6th October to 27th December.—Inspector McNeil.—Boonah, Dugandan, Kalbar, Harrisville, Fernvale, Lowood, Coominya, Esk, Toogoolawah, Moore, Linville, Benarkin, Blackbutt, Yarraman Creek, Nanango, Kingaroy, Taabinga.

1926.—6th October to 27th November.—Inspector McNeil.—Coolabunia, Wooroolin, Wondai, Tingoora, Murgon, Barambah, Goomeri, Kilkivan, Woolooga, Theebine, Gundiah.

1926.—20th October to 19th November.—Inspector Lowes.—Southport, Coolangatta, Burleigh, West Burleigh, Nerang, Oxenford, Coomera, Beenleigh, Yatala, Bethania, Waterford, Canungra, Tambourine, Tambourine Mountain, Logan, Beaudesert.

1926.—13th to 17th December.—Inspector McNeil.—Maryborough, Bundaberg, Gympie.

1927.—14th March to 2nd April.—Inspector Lowes.—Rosewood, Marburg, Haigslea, Calvert, Grandchester, Laidley, Gatton, Grantham, Forest Hill.

1927.—14th March to 15th April.—Inspector Wiseman.—Gympie, Maryborough, Bundaberg, Gin Gin, Mount Perry.

1927.—3rd May to 18th June.—Inspector Dudley.—Landsborough, Palmwoods, Woombye, Nambour, Yandina, Eumundi, Cooroy, Pomona, Tiaro, Mungar Junction, Eidsvold, Mundubbera, Gayndah, Biggenden, Degilbo, Dallarnil, Cordalba, Childers, Isis Junction, Howard, Burrum, Torbanlea, Maryborough, Cooran, Cooroy, Tewantin, Maroochydore.

Fish Supply.—During the entire year the State Fish Market, Brisbane, has been supervised by Inspector Hiddins, who has condemned and destroyed as unfit for consumption 92 tons 14 cwt. 3 qr. 3 lb. of fish of various kinds; in addition to which, 587 mud crabs (green), and 292 mud crabs (dead), 327 sand crabs, and one shark were also rejected by this officer. List A appended contains details.

Unsound Foods and Drugs.—During the twelve months a total quantity of 103 tons 12 cwt. 3 qr. 16 lb. 12 oz. of deteriorated and unsound food and drugs was destroyed under the supervision of members of headquarters staff. A considerable proportion of the goods included under this heading consisted of stocks damaged by fire and water. List B contains full particulars.

PROSECUTIONS.

A total number of 81 prosecutions were undertaken by inspectors of headquarters staff for various breaches of the Health Acts during the period under review.

Of these, 80 were successful, and penalties amounting to fines £318 9s., and costs £67 5s. imposed by the Police Magistrates. One case—that in which a man was charged with the offence of handling food for sale while suffering from a venereal disease—was dismissed because the Magistrate found as a question of fact that the food was not intended for consumption by man.

The 80 cases in which convictions were obtained were made and resulted as follows:—

Adulterated Milk (added water).—Twenty cases. Total fines, £155 11s., and total costs, £26 16s. 6d., being an average fine of £7 8s. 1d., and average costs £1 5s. 6d. per case. (See List C for details.)

Milk below Standard (fat deficiency).—Three cases. Total fines, £12, and total costs, £3 13s. 6d., being an average fine of £4, and average costs, £1 4s. 6d. per case. (See List C for details.)

Adulterated Liquor (added water).—Three cases. Total fines, £26, and total costs, £3 13s. 6d., being an average fine of £8 13s. 4d., and average costs, £1 4s. 6d. per case.

Breaches of the Poisons Regulations.—Fourteen cases. Total fines, £28 15s. 6d., and total costs, £18 9s., being an average fine of £2 1s. 1d., and average costs, £1 6s. 4d. per case. (See List E for details.)

Miscellaneous Prosecutions.—Forty-one cases. Total fines, £96 2s. 6d., and total costs, £13 12s. 6d., being an average fine of £2 6s. 10d., and average costs, 6s. 7d. per case. (See List F for details.)

REMARKS *re* PROSECUTIONS.

Milk.—Of the twenty adulterated milks above referred to, Brisbane vendors supplied 7, Sandgate 2, Bundaberg 3, Maryborough 2, Gympie 1, Charleville 2, Roma 2, and Laidley 1.

The average percentage of added water per sample works out at 13·8 per cent., the highest being 75·3 per cent. (a record) and the lowest 4·3 per cent.

In the Matter of Prosecutions for Fat Deficiencies, the samples in question were all obtained in the Brisbane Metropolitan area. The average deficiency in fat works out at 32 per cent., the highest being 36 per cent., and the lowest 30 per cent. deficient.

Alcoholic Liquors.—The three adulterated liquors were obtained from hotels at Charleville, Wallumbilla, and Tingara respectively, and the spirit in question consisted in each instance of whisky.

The adulteration was added water in each case, in proportion ranging from 5·4 per cent. to 10 per cent.

Poisons.—Of the fourteen prosecutions had under the Poisons Regulations six were for the offence of selling poisons without a license, five for selling poison in a food container (beer bottle, etc.), one for the sale of an unlabelled poisons package, and two for unauthorised prescriptions which included certain scheduled poisons.

Miscellaneous Prosecutions.—The forty-one cases mentioned under the heading “Miscellaneous” include the offences of selling lightweight bread, adulterated fish, adulterated cordials, exposure of food for sale to contamination, and of having dirty bakehouses, yeast room, sanitary convenience, dirty milk carts, uncovered milk cart, carrying water on a milk cart, having no name or license number on a milk cart, stopping milk cans with soap and other prohibited substances, and for closing milk-can lids with rag.

FOOD AND DRUG SAMPLING.

During the twelve months under review a grand total of 2,187 samples of foods and drugs were obtained by the Department’s officers and submitted to the Government Chemical Laboratory for analysis. Of this number 1,139 were legal samples purchased or obtained strictly in accordance with the requirements of the Health Acts, and 1,048 were unofficial samples procured for purposes of investigation.

Milk Sampling (for Chemical Analysis).—Nine hundred and forty-one samples of fresh milk were obtained and submitted to the Government Chemical Laboratory.

For full details concerning same please see report of the Government Analyst.

SAMPLING (FOR BACTERIOLOGICAL EXAMINATION).

Milk.—Three hundred samples of fresh milk were procured and submitted to this Department’s bacteriologist for examination.

Specimens other than Milk.—Forty-three samples consisting of ice, ice cream, soda water, water, and disinfectants were also handed in for investigation. (See List G for details.)

RESULTS OF BACTERIOLOGICAL MILK SAMPLING.

During April and May of last fiscal year, 220 samples of milk for bacteriological examination were obtained. Of this number, 41·8 per cent. passed and 58·2 per cent. failed. In order to ascertain whether any improvement had occurred since initial examinations were made, a secondary sampling was commenced in June of that year, when 83 of the 220 suppliers’ milks were again sampled, with the result that 79·5 per cent. passed and 20·5 per cent. failed.

At the beginning of the fiscal year this sampling was continued, and the following table shows the results:—

Organisms per Cubic Centimetre.	No.	Percentages.				Total Percentages.	Months Taken.	
10,000 or under	14	10·8	43·1	21·6	64·7	75·5	83·1 passed	July to Octo- ber
Over 10,000 and under 50,000 ..	42	32·3						
Over 50,000 and under 250,000 ..	28	21·6	21·6	10·8	7·6	16·9 failed		
Over 250,000 and under 500,000 ..	14	10·8	10·8	7·6				
Over 500,000 and under 1,000,000 ..	10	7·6	7·6	16·9				
Over 1,000,000	22	16·9	16·9	16·9	16·9			
Totals	130	100	100	100	100	100		

While this investigation was proceeding a further 61 suppliers’ milks were sampled for the first time. The following table shows the results:—

Organisms per Cubic Centimetre.	No.	Percentages.				Total Percentages.	Months Taken.	
10,000 or under	6	9·8	27·9	29·5	57·4	63·9	July to October	
Over 10,000 and under 50,000 ..	11	18·1						
Over 50,000 and under 250,000 ..	18	29·5	8·2	27·9	27·9	27·9		
Over 250,000 and under 500,000 ..	4	6·5						
Over 500,000 and under 1,000,000 ..	5	8·2						
Over 1,000,000	17	27·9	27·9	27·9	27·9	27·9	27·9 failed	
Totals	61	100	100	100	100	100		

As these samples were obtained at the Railway Stations on arrival, and represented milk from outside Brisbane, a sampling of the warm milk supply was commenced. Seventy-nine (79)

samples were obtained at the dairies at the time of milking. These were from dairies supplying warm milk, and the following table shows the results:—

Organisms per Cubic Centimetre.	No.	Percentages.				Total Percentages.	Months Taken.
10,000 or under	23	29.1	63.3	77.2	84.8	92.4 passed	December, 1926, to June, 1927.
Over 10,000 and under 50,000 ..	27	34.2					
Over 50,000 and under 250,000 ..	11	13.9					
Over 250,000 and under 500,000 ..	6	7.6	7.6	7.6	7.6 failed		
Over 500,000 and under 1,000,000 ..	6	7.6	7.6	7.6			
Over 1,000,000	6	7.6	7.6	7.6			
Totals	79	100	100	100	100	100	

Briefly summarised, the position in so far as the bacteriological examination of the Brisbane milk supply is concerned is that following the initial survey made by the Department during 1924-5, and as a result of which the existing standard of not more than one million micro-organisms per cubic centimetre was decided upon as a tentative figure, specimens have been obtained by our officers from 281 dairymen forwarding milk to Brisbane by rail from stations ranging from Churchbank (40 miles) on the Fassifern line, Grandchester (44 miles) on the main Toowoomba line, Burpengarry (26 miles) on the North Coast line, Dayboro' (30 miles) on the Dayboro' line, and from 79 dairies in the Brisbane Metropolitan area supplying fresh warm milk to the city.

Of the first series of samples of milk obtained on arrival at Brisbane Railway Stations during the fiscal year 1925-6 only 41.8 per cent. furnished bacterial counts within the prescribed limits.

Then followed a campaign of education conducted by this Department in conjunction with the Department of Agriculture and Stock—following which a second series of samples was obtained by our officers.

Of this second series 81.3 per cent. passed.

At a later stage some 61 suppliers who had not previously been dealt with were sampled with the result that the milk supplied by 72.1 per cent. of these conformed.

Senders whose milk failed have been cautioned and instructed. Further samples will be taken from such persons at an early date.

Following up the above work on Railway, or so-called “cold,” milk, a start was made during the period under review to ascertain the condition of milk produced within easy distance of the city and usually transported thereto by horse or motor vehicle. In such connection 79 dairies have been visited by our inspector, and samples of milk obtained immediately after milking and straining.

Of this series 92.4 per cent. satisfied bacteriological requirements.

The work of sampling the milk of such dairies will be continued by our officer, working in conjunction with the Dairy Inspector of the Department of Agriculture and Stock in whose area the particular dairy happens to be situated.

At a later stage it is proposed to investigate bacteriologically milk in the possession of milk-depôt keepers and licensed milk-sellers in the city itself—both on carts and in shops.

The task is a big one, and necessarily slow, but it had to be started at the base in order to enable the Department to arrive at a correct estimate of the position and to control same effectively.

The railway-milk figures are surprisingly low when compared with figures for such milks published by authorities in the United States of America, but when one considers the respective distances over which the milks are transported and the respective times taken in transit, it is easy to appreciate why the advantage is so overwhelmingly in favour of Brisbane milks, in spite of the lack of cold storage facilities on trains in Queensland.

For instance, in Brisbane the milk arriving by rail is seldom over two hours on the train, and the greater proportion is unloaded within one hour after despatch from the consigning station.

On the other hand, in the United States the large cities of necessity must draw their milk supplies from far-distant sources—Boston, for instance, from Canada, Maine, and Vermont; New York from points 400 miles distant—with the result that in such places it is no unusual experience to find milk from 30 to 40 hours old when delivered to the consumer, and—unless it has been pasteurized—with a high bacterial content.

As the result of our investigations, I am of the opinion that the Metropolitan Milk Supply of Brisbane—although by no means perfect—is not quite so bad as is alleged by individuals who speak only from hearsay and have had no opportunity to accurately assess its quality by biological and chemical examination and analysis.

Further, I would remark that the difference in favour of the warm milk samples reported upon in this report, as compared with the samples arriving by rail (92.4 per cent. passed as against 81.3 per cent.), is more apparent than real—the former being taken at the point of production and immediately after milking, and the latter after a period of from four to five hours has elapsed; so that in all probability these two classes of milk, as conditions now stand, would, if examined together at equal time after production, closely approximate in numerical count and bacterial flora.

It may be opportune to remark that at present the only legal definition existing in such connection is the interpretation of the description “fresh warm milk” contained in the “Award

for Distributors of Fresh Warm Milk, Brisbane," published in the *Government Gazette* of the 18th August, 1925, in which it is enacted that—

"Fresh Warm Milk" shall mean milk that—

- (a) In the case of the first daily delivery, has been drawn from the cow on the morning of delivery, and is delivered to the consumer not later than 9 a.m.;
- (b) In the case of the second daily delivery, has been drawn from the cow after 9 a.m. on the day of delivery and is delivered to the consumer not later than 5 p.m.; and
- (c) In either case has not been subjected to any treatment after being drawn from the cow before delivery to the consumer, other than water cooling at the farm or dairy at which it is produced.

In the "Cold Milk Distributors and Vendors' Award, Brisbane," which was gazetted upon the day following, no definition of "cold milk" is included, so that in the ordinary course I presume the expression would include any fresh milk other than milk included under the definition "fresh warm milk" quoted previously.

PASTEURIZED MILK.

Two new companies have recently opened up depôts in Brisbane for the treatment and sale of pasteurized milk. Both appear to have started on the right lines, but have not yet had time to get their premises and plants into complete order and condition.

At a later date it is intended to take a representative series of samples from these plants for bacteriological investigation and for the purpose of checking results.

SPECIAL INVESTIGATIONS.

Soda Fountains.

As a result of the discovery made during the year that soda and water issued from certain soda fountains in the City of Brisbane contained lead in excessive amounts, a series of samples of such article were obtained from all cafés and refreshment rooms in both Brisbane and South Brisbane for the purpose of ascertaining to what extent such contamination existed. This investigation, which necessitated the taking of some 394 samples of soda water, as well as a large number of samples of tap water and water from supply cisterns, made considerable inroads upon the time and patience of our officers.

In every instance in which the analyst's certificate disclosed lead in excess of 100 gr. per pint in any sample of soda water, the person from whom the sample was taken was immediately served with a notice in writing to forthwith cease from the further sale of same until such time as the defect was corrected.

This necessitated the dismantling and overhaul of a large number of soda fountains when it was found that the interiors of certain carbonators were jointed at the seams, at the ends of agitator shafts, and elsewhere with solder which contained lead. All faulty solder had to be removed and to be replaced with lead-free material, and in numerous instances fresh tin lining had to be provided.

The investigation was then extended to other centres, and samples of soda water received from country districts—a number of which were found to be similarly affected, and the like treatment meted out.

In addition to the sampling of the soda water and of the water entering into its composition, specimens of carbonator linings, solder, packing, piping, washers, hose, &c., &c., were obtained for the purpose of ascertaining their composition by analysis. Unfortunately, the renovation of carbonators and elimination of lead solder from their interiors has not apparently in every instance achieved the desired result, as with certain waters—such as that supplied in Brisbane—even linings composed of sheet tin (commercially pure and having no lead-soldered seams) appear to yield an appreciable lead content to the soda water prepared therein. However, experiment has shown that by the use in such cases of a special harmless chemical solution, fed to the carbonator with the water, lead can be eliminated, or at any rate reduced in quantity to within the prescribed limit, and during the forthcoming summer it is anticipated this solution will be in general use by soda-fountain keepers in areas in which its employment is indicated.

During the progress of this investigation a series of bottled soda waters obtained at aerated water factories and refreshment-rooms were submitted to the analyst, who reported same free from lead.

SPIRITS IN METAL-STOPPERED FLASKS.

During the early portion of the fiscal year a proprietary spirit, packed in metal-stoppered flasks, was tested by our inspectors and found to be below standard strength.

As the contents apparently had not been tampered with, a series of examinations were made of the same lines in wholesalers' hands when it was found that similar flasks in cases bearing Customs brands and which were securely nailed down and wired, also furnished hydrometer readings below standard requirements.

As none of these flasks was found to be full it seemed not unlikely that exaporation of the contents had taken place subsequent to packing—due possibly to a faulty stopper.

In order to test this hypothesis an extensive series of samples of such flasks of spirit was obtained and submitted to the analyst, who, after a comprehensive series of tests, which extended over 126 days, reported:—

(Temperature range, 60° F. to 80° F.)		
Decrease in strength in tightly corked flask in 126 days	.. ..	4.3° to 6.1°
Decrease in strength in flask with $\frac{1}{8}$ th turn of cork	.. ..	7.2°
Decrease in strength in flask with $\frac{1}{4}$ th turn of cork	.. ..	12.2°
Decrease in strength in flask with $\frac{1}{2}$ turn of cork	.. ..	15.6°
Decrease in strength in flask tightly corked, resting on flat side	.. ..	4.2°

The results from above tests showed that the cork material (disc) in the metal caps was not effective for maintaining the strength of the spirit in the flasks.

In such connection it was ascertained that experiments conducted by the packers with a

better quality paraffined cork disc in the metal screw-stopper yielded satisfactory results, but in view of the findings of this Department, and in order to preclude the possibility of any future like happening, it was decided by them that the metal screw-top should be discarded for the Queensland market and the orthodox glass-stopper be substituted in flasks.

Concerning the loss of strength which spirits undergo through exposure to the air, some interesting particulars were published in "Harper's Wine and Spirit Gazette," of 29th May, 1926, in which are quoted some tests undertaken by the City Analyst of Birmingham, England.

In one case, three-quarters of a pint of whisky was put in a spirit bottle, which was left uncorked for twenty-two days in an air temperature varying from 50 to 70 degrees F. During that period the spirit strength altered from 31.4 to 32.4 degrees under proof, and about one-half ounce of liquid evaporated.

In another case, a quarter-pint of whisky left uncovered in a half-pint drinking glass altered from 31.2 to 32.3 degrees under proof, a loss of 1.1 degree of proof spirit. In twenty-four hours the loss was as much as 4.1 degrees, and about a quarter-ounce of the liquid evaporated.

The air temperature in this case was from 69 to 70 degrees F.

IMPORTED FISH.

A series of samples of imported smoked fish (British and South African) was obtained from cases immediately upon arrival at the Port of Brisbane and submitted to the Government Analyst for the purpose of ascertaining the presence and proportion of any chemical preservative substance and of any added colouring matter and the nature thereof. As a result it was found that boric acid was being employed in certain instances, and that coal-tar dyes were also used.

Upon this matter being discussed at length at the recent Interstate Conference upon Uniform Standards for Food and Drugs, it was decided to recommend prohibition of the use of chemical preservative substances in soft-cured fish and to confine added colouring matter to the vegetable dye—annatto.

GENERAL.

The quality of the principal food lines offered for sale upon the local market during the period under review has been uniformly good, and reasonable care in their preparation and storage appears to have been on the whole exercised by those responsible for their condition and keeping.

Chemical preservatives, in instances where such are employed in the treatment of food for sale, appear in the majority of cases to be more sparingly used than in the past, and there has been no tendency evinced on the part of manufacturers to depart from the preservatives permitted by the Food and Drug Regulations.

Butchers and smallgoodsmen, however, are apparently the most difficult tradesmen to control in the matter of the addition of chemical

preservatives, and occasionally excessive proportions of sulphur dioxide have been met with in sausages and minced meat.

Spirits, on the whole, have been uniformly good and true to label, but in certain instances evidence of refilling proprietary spirits bottles with draught spirit has been observed and warnings issued by inspectors.

Wines have been kept under observation, and a complete series of the cheaper brands of bottled wines on sale in the local market obtained and submitted to the Analyst, who reported same as conforming to the standard.

Bottled beers (imported and local) also received similar attention, and with like results.

Draught beer also satisfied requirements.

Vinegars (nineteen different brands, local and imported) were sampled and analysed, furnishing satisfactory results.

Jams, jellies, and preserves have been found true to label.

Sauces and pickles of good quality.

Bread generally has been sound and well-baked, and comparatively few instances of light-weight detected.

Butter has been of good quality, and no tendency observed on the part of traders to exceed the permitted quantity of preservative in same.

Spices, cereals, and dried fruits have been generally good.

Canned foods sound and well packed.

POISONS.

The law relating to the sale and use of poisons—"The Poisons Regulations, 1924"—has been strictly enforced throughout the State, and every care taken to prevent the sale of such by unauthorised persons and to assure the proper packing and labelling of poisons.

At the close of the fiscal year there were upon the Department's books 530 persons licensed as dealers in poisons in classes as follows:—

General dealers in poisons	..	..	205
Dealers in photographic poisons	..	..	8
Dealers in horticultural and agricultural poisons	..	..	217
Wholesale dealers in poisons	..	..	96
Chemists' assistants	..	..	4
Total	..	..	530

Fourteen prosecutions for various breaches of the Poisons Regulations were successfully undertaken during the year, and penalties (fines and costs), totalling £47 4s. 6d., imposed by the magistrate. One case (selling a scheduled poison to an aboriginal native) remained part heard at the termination of the fiscal year.

H. W. PETHERICK,

Chief Inspector, Foods and Drugs.

COUNTRY REPORTS.

TOOWOOMBA.

Inspector R. P. Sanderson, the officer in charge of Toowoomba sub-office, reports that the usual attention has been given by him to work relating to the sale of foods and drugs, as well as to his duties under the Poisons Regulations.

He states that, as a result of his supervision and representations to the various purveyors in the communities visited by him, a steady improvement has resulted.

Reference to Inspector Sanderson's figures shows that the number of milk samples submitted for analysis during the year indicate an advance on those of previous years, attributable mainly to the greater facility afforded by the employment in the work of collection of this officer's private car.

So far as the City of Toowoomba is concerned, the samples in question proved remarkably free from fraudulent adulterations; but in the case of Warwick, the condition of the milk supply, as disclosed by analyses, proved to be alarmingly dishonest, as is borne out by the magnitude of the penalties imposed by the presiding police magistrate when prosecutions were brought before him for adjudication.

Re Poisons.—Licensed poison dealers and other traders in poisons were kept under strict observation; but now that the spirit of the Poisons

Regulations is appreciated, little difficulty is experienced in this area in obtaining satisfactory compliance with the requirements of the said law.

In addition to his work in and around Toowoomba, Inspector Sanderson has, during the period under review, paid visits of inspection to the following places:—Drayton, Southbrook, Pittsworth, Brookstead, Milmerran, Leyburn, Karara, Greymare, Pratten, Killarney, Tannymorel, Danderoo, Emu Vale, Yangan, Mount Sturt, Freestone, Maryvale, Gladfield, Goomburra, Hendon, Allora, Warwick, Sandy Creek, Kingsthorpe, Oakey, Acland, Muldu, Balgowan, Kulpi, Peranga, Cooyar, Wutul, MacLagan, Quinalow, Kaimkillenbun, Bell, Jandowae, Macalister, Warra, Kogan, Tara, Dalby, Nobby, Greenmount, Cambooya, Rangeview.

In the performance of his duties Inspector Sanderson has travelled some 1,586 miles, of which 232 miles were by train and 1,354 miles by motor-car.

Sampling.—A total of 187 samples of foods and drugs were submitted by Inspector Sanderson during the twelve months. Of this number 160 consisted of fresh milk. In the tables following will be found details of prosecutions undertaken, unsound foods disposed of, and inspections made by Inspector Sanderson during the year.

Prosecutions.

Date.	Place.	Complaint.	Fines.	Costs.
1926.			£ s. d.	£ s. d.
23rd September ..	Toowoomba ..	Milk, added water 15.2 per cent. ..	5 0 0	1 4 6
1927.				
19th February	Peranga	Rum, excess water 5.2 per cent.	5 0 0	2 10 6
24th February	Killarney	Whisky, excess water 10.2 per cent. ..	5 0 0	1 4 6
24th February	Killarney	Rum, excess water 15.8 per cent.	5 0 0	1 4 6
25th February	Warwick	Milk, added water 33.4 per cent.	20 0 0	1 16 6
25th February	Warwick	Milk, added water 11.6 per cent.	10 0 0	1 16 6
25th February	Warwick	Milk, added water 58.9 per cent.	20 0 0	1 16 6
25th February	Warwick	Milk, added water 22.5 per cent.	10 0 0	1 16 6
25th February	Warwick	Milk, added water 26.2 per cent.	20 0 0	1 16 6
25th February	Warwick	Gin, excess water 7.2 per cent.	5 0 0	1 16 6
7th April	Toowoomba	Dirty premises	16 13 6	3 6 6
26th May	Toowoomba	Milk, added water 9.8 per cent.	0 1 0	3 11 6
Total			121 14 6	24 1 0

Unsound Foods Destroyed by Mutual Arrangement.

Article.	Quantity.	Cwt.	qr.	lb.
Bacon	6 parcels	0	3	4
Dates	10 parcels	1	0	3
Fish, fresh	10 parcels	1	2	5
Fish, canned	310 tins	1	1	3½
Fruit, dried	22 parcels	2	3	6
Jam	101 tins	1	3	1
Milk, canned	16 tins	0	0	16
Meat, canned	51 tins	0	2	1
Oats	10 parcels	0	1	2
Potatoes	16 bags	16	0	0
Confectionery	61 parcels	0	3	3½
Total .. .. .	..	26	3	17

ROCKHAMPTON.

Inspector L. J. Butts, officer in charge of the Rockhampton sub-office, reports that, in addition to his duties in and around the City of Rockhampton, he has paid visits of inspection to the

following towns in his area:—Westwood, Yepoon, Emu Park, Mount Morgan, Kabra, Marmor, Raglan, Mount Larcom, Gladstone, Miriam Vale, Avondale, Rosedale, Murray Creek, Bororan, Bajool, Sandhills, Hartley, Emerald, Muttaborra, Longreach, Ilfracombe, Barcaldine, Aramac, Jericho, Blackall, Isisford, Tambo, Alpha, Bogantungan, Rubyvale, Sapphire town, Anakie, Blair Athol, Clermont, Capella, Springsure, Comet, Blackwater, Bluff, Dingo, and Duaringa.

The total distance covered on these tours was 2,937 miles—2,100 miles of which were travelled by train, 489 miles by coach, 232 miles by motor car (private), 60 miles by motor cycle, and 56 miles by 'bus.

As a result of his inspections Mr. Butts reports very great improvement all round in the quality of foodstuffs vended, and in the conditions connected with the manufacture, storage, and handling of same.

Inspector Butts states that in the area under his control many new businesses for the sale of food have been opened since the date of his last annual report, many of the keepers of which have been without previous knowledge of such trades, and who, consequently, have required attention along educational lines. He reports, further, that wholesale warehouses, factories, and wharves have been inspected in addition to retail shops, and that milk-carts, bakers' carts, and other vehicles carrying goods for sale have also received attention.

Bread-weighing, liquor inspection, and food sampling have also been carried out as occasion has offered, or as circumstances have appeared to warrant.

Arising out of such inspections, unsound food material, totalling 3 tons 6 cwt. 3 qr. and 3 lb., has been destroyed under the supervision of Inspector Butts, who furnishes the following details in connection therewith:—

Unsound Food Destroyed.

			Tons cwt. qr. lb.			
Vegetables—						
Cabbage	..	..	0	1	1	10
Turnips	..	..	0	6	3	14
Tomatoes	..	..	0	4	0	0
Fruit—						
Fresh	..	..	1	13	0	17
Canned	..	..	0	0	2	20
Fish—						
Fresh	..	..	0	7	0	0
Canned	..	..	0	1	2	11
Lemon peel	..	..	0	5	1	0
Shelled almonds	..	..	0	6	2	0
Jams	..	..	0	0	1	15
Total	..	..	3	6	3	3

Prosecutions.—Two prosecutions have been undertaken by Inspector Butts during the year, under Part VI. of the Health Acts—one for milk adulteration (18 per cent. added water), in which the vendor was fined £5, with analyst's fee £1 1s., professional costs £2 2s., and 3s. 6d. costs of court; and the other for the offence of carrying water upon a milk-cart, in which the party concerned was fined £5, with 3s. 6d. costs of court.

Food Sampling.—During the twelve months under review a total of sixty-three samples were submitted by Inspector Butts for analysis, as follows:—

Milk	..	..	..	..	..	48
Alcoholic liquors	..	..	..	..	..	2
Soda water	..	..	..	..	..	12
Arsenate of lead	..	..	..	..	..	1
Total	..	..	..	..	..	63

Poisons.—With but one exception Inspector Butts reports that in his area the Poisons Regulations have been carried out in their entirety.

CHARLEVILLE.

Inspector C. W. Beaver, officer in charge of the recently established sub-office at Charleville, reports as the result of five and a-half months' occupation that very marked improvements have been made in the handling of foodstuffs as compared with a few years ago.

Food Sampling.—Sixteen samples of milk were taken by Inspector Beaver in Charleville and submitted to the Government Analyst. Seven of the first eight samples, although returning no added water, were seriously deficient in butterfat. An exhaustive inquiry by our officer revealed the fact that the dairymen concerned

were not adding the "strippings" to the milk sold, these going to the calves. Upon this omission being rectified, subsequent analyses of a further series of samples disclosed satisfactory results.

In addition to his routine duties in and around Charleville, Inspector Beaver has paid visits of inspection to the following places:—Muckadilla, Roma, Mitchell, Mungallala, Quilpie, Adavale, Toompine, Thargomindah, Eulo, Cunnamulla, Wyandra—the distance travelled on tour being 1,062 miles by rail.

CLONCURRY.

Inspector Chas. Mitchell, officer in charge of the recently established sub-office at Cloncurry, reports as follows:—

"In addition to inspections in Cloncurry during the five and a-half months I have been stationed in such town, I have visited Dajarra, Duchess, Kuridala, Selwyn, Julia Creek, Richmond, Nonda, and Nelia."

It was found that on the whole the Food and Drug Regulations were being fairly well observed, but in some cases it was necessary to serve notices to remedy defaults, and such notices are so far being attended to.

Liquor-testing and bread-weighing have shown that the standards and other requirements are being observed.

The Poisons Regulations have also received attention, and no serious breach has yet been noticed.

The following unsound food was destroyed:—

				Qr.	lb.	oz.
Tinned fish	..	..	..	2	15	8
Tinned meat paste	..	..	..	0	2	3
Tinned jam	..	..	..	0	1	0
Tinned milk	..	..	..	0	9	0
Total weight	..	..	..	2	27	11

MACKAY.

Inspector A. E. L. Mason, the officer in charge of the recently established sub-office at Mackay, reports that during the period which has elapsed since he took over, he has inspected some 416 premises connected with the handling of food for sale, and has performed an exhaustive series of inspections of hotels for the purposes of the Liquor Act, as the result of which numerous notices have been served, and considerable improvements effected in the conduct of the businesses concerned.

In addition to his duties in and around Mackay, Inspector Mason has paid visits of inspection to the following outside places in his district:—Sarina, Koumala, Farleigh, Kolijo, Bloomsbury, Proserpine, Walkerston, Mirani, Gargett, Finch Hatton, Netherdale—travelling 232 miles by rail on tour.

CAIRNS.

Inspector Austin, the officer in charge of Cairns sub-office, reports that food stocks in his district are clean and labelling in good order. Bread he has found of due weight, bakehouses clean, and bakers cleanly in their work.

Liquors at hotels have been up to standard and, from check tests of full bottles, spirits are usually true to label. He states also that glass-washing is properly carried out, and that

where water under pressure is available mechanical glass-washers are installed if the supply is adequate. Beer pipes and pumps are well watched and are kept clean. Restaurants and refreshment-rooms are kept up to requirements. Grocers are obeying the law in regard to weights on packages, and their premises are being continually improved.

The Poisons Regulations have been strictly enforced, and poisons sales books kept where required.

Apart from his work in and around Cairns, Inspector Austin has paid visits of inspection to the following outside places:—Kuranda, Edmonton, Hambleton, Babinda, Cooktown, Tully, Malanda, Stratford, Redlynch, Silkwood, Gordonvale, Aloomba, Fishery Creek, Mirriwinni, Pawningilly, Bartle Frere, Mountain View, Woree, Double Island, Freshwater, Biboohra, Mareeba, Tolga, Atherton.

On his tours Inspector Austin has travelled 2,680 miles—1,014 miles by train, 200 by steamer, 276 miles by motor-car, and 1,190 miles by the latter means in and around Cairns itself.

Food Sampling.—Sixty-six samples were submitted by Inspector Austin.

Unsound Food.—A quantity, totalling 1 ton and 20½ lb., of assorted unsound and deteriorated food material was destroyed under the direction of this officer during the twelve months.

Prosecutions.—Two prosecutions were undertaken, and one (unlawful possession of opium by a Chinaman) dismissed, and one (adulterated milk) successful, and a penalty of fine £8, analyst's fee £1 1s., and costs 3s. 6d., imposed by the magistrate.

Twenty-eight notices were served by Inspector Austin during the year.

TOWNSVILLE.

Inspector C. J. Whitford, officer in charge of the Department's sub-office at Townsville, reports that, in addition to his sanitary duties, inspections were made by him under The Food and Drug Regulations, Milk-sellers' Regulations, Poisons Regulations, and the Liquor Act.

Arising out of such inspections he issued seventy blue notices requiring correction of defects observed.

Notices were also issued under the Liquor Act—copies of which were submitted to Headquarters, Brisbane.

In connection with his hotel work, Inspector Whitford states that results achieved in Townsville as the result of his gazettal as a licensing inspector under the Liquor Act fully justify the wisdom of such appointment, as he was thereby afforded opportunity to inspect and serve notices prior to the sittings of the Annual Licensing Court.

Apart from his routine duties in and around the City of Townsville, Inspector Whitford has during the twelve months under review paid visits of inspection to the following outside towns, viz.:—Proserpine, Ayr, Brandon, Charters Towers, Ravenswood Junction, Homestead, Pentland, Winton, Corfield, Hughenden, Prairie, Torrens Creek—covering on such tours a total of 1,248 miles.

Unsound Foods.—During the year Inspector Whitford issued certificates for the disposal of

11 tons 12 cwt. 3 qr. 17½ lb. of deteriorated and unsound food material, made up as follows:—

	Tons	cwt.	qr.	lb.
Potatoes	3	17	0	0
Onions	0	2	0	0
Turnips	0	7	0	0
Beans and peas	0	18	1	0
Tomatoes	1	5	2	0
Fruit	3	14	3	0
Eggs	0	1	2	0
Cheese	0	6	0	0
Fish (fresh)	0	7	0	0
Confectionery	0	1	0	0
Jam and fruits in tins, &c. ..	0	12	3	17½
Total	11	12	3	17½

Sampling.—Twenty-four legal and four unofficial samples, as under, were submitted for analysis, viz.:—

Milk	14
Soda water	8
Spirits	2
Soap	4
Total	28

Prosecutions.—Thirteen persons were prosecuted during the year for breaches of the Health Acts as follows—a conviction being secured in each case and penalties as under imposed by the magistrates:—

Cases.	Fines.			Costs.		
	£	s.	d.	£	s.	d.
Breach of Poisons Regulations	2	6	0 0	0	7	0
Shortweight bread	1	3	5 0	0	3	6
Adulterated milk	4	19	0 0	8	1	0
Adulterated spirits	1	5	0 0	1	4	6
Breaches of Food and Drug Regulations	5	12	0 0	6	9	6
Total	13	45	5 0	16	5	6

List A.

PARTICULARS OF UNSOUND FISH CONDEMNED DURING THE YEAR ENDED 30TH JUNE, 1927.

Description of Fish.	Tons.	cwt.	qrs.	lb.
Barramundi	0	0	0	11
Blackfish	1	17	1	25
Bream	8	11	2	19
Bulls-eyes	0	2	2	25
Butterfish	0	0	2	24
Cod	0	3	3	1
Crawfish	0	11	2	17
Emperor	0	1	1	14
Flathead	0	14	0	23
Garfish	1	4	2	22
Groper	0	0	3	16
Herrings, salt	0	16	0	0
Herrings, red	0	6	1	0
Jewfish	0	1	2	15
Johnny Dories	0	5	1	24
Kingfish	0	0	2	19
Mackerel	2	2	3	20
Mixed fish	9	0	2	5
Morwong	0	0	0	18
Mullet	55	14	1	25
Nanygai	0	0	1	2
Oysters	0	0	1	0
Parrot fish	0	0	0	11
Pikes	0	0	1	22
Prawns	0	3	1	21
Salmon	0	0	0	11
Salmon, smoked	0	0	1	2
Schnapper	1	4	0	12
Squire	0	3	2	16
Tailer	1	18	2	7
Trevally	0	1	0	0
Trumpeter	0	13	1	0
Whiting	6	11	3	24
Total weight	92	14	3	3

In addition to the above total, there were also condemned during the year the following:—One shark of no specified weight; crabs (mud), 587 green and 292 dead; crabs (sand), 327.

List B.

PARTICULARS OF UNSOUND FOODS AND DRUGS CONDEMNED IN THE METROPOLITAN AREA DURING THE YEAR ENDED 30TH JUNE, 1927.

Substance.	Tons.	cwt.	qrs.	lb.	ozs.	Substance.	Tons.	cwt.	qrs.	lb.	ozs.
Ale	88	13	1	13	0	Lemon butter	0	0	0	1	0
Bacon	1	4	0	14	0	Macaroni	0	0	0	2	0
Baking powder	0	0	3	5	0	Meals—					
Barley	0	0	0	12	0	Digestive	0	0	0	2	0
Butter	0	17	2	12	0	Meggitt's	0	0	1	22	0
Carroway seed	0	0	0	0	8	Oat	0	0	0	21	0
Chemicals	0	2	0	16	0	Rolled oats	0	7	0	0	0
Cocoa	0	0	0	0	8	Meat pastes (mixed)	0	6	1	18	0
Cocoa (desiccated)	0	2	0	20	0	Medicines, proprietary	0	0	1	2	8
Coffee	0	2	2	25	0	Milk—					
Cordials—						Condensed	1	7	1	12	0
Lime juice	0	3	2	8	0	Skimmed	0	0	0	15	0
Squash	0	4	1	4	0	Pepper	0	0	1	0	0
Confectionery	0	3	3	16	0	Pickles	0	4	0	0	0
Dates	0	1	1	12	0	Pigs' feet (salted)	0	2	3	0	0
Essences	0	0	0	0	4	Pork	0	1	2	0	0
Fruit, Dried—						Sauce	0	6	2	0	0
Prunes	0	0	2	9	8	Sausage (Windsor)	0	1	3	16	0
Apples	0	2	2	0	0	Spices	0	0	2	14	0
Cherries	0	0	2	0	0	Syrup	1	6	1	8	0
Mixed	0	2	0	0	0	Tea	0	6	1	4	0
Peaches	0	0	2	0	0	Tobacco	0	1	3	8	0
Pears	0	15	2	0	0	Vegetables—					
Fish—						Garlic	0	0	2	0	0
Haddock	0	0	0	1	0	Mushrooms	0	0	1	20	0
Herrings	0	9	1	13	0	Peas	0	0	3	23	0
Salmon	0	5	1	5	0	Potatoes	1	18	2	0	0
Sardines	0	2	0	21	0	Turnips	0	4	0	17	0
Honey	2	8	0	3	8	Vermicelli	0	0	0	4	0
Icing sugar	0	1	1	20	0	Vinegar	0	0	0	2	0
Infants' foods	0	0	0	5	0	Vita bits	0	0	3	18	0
Jam	0	3	2	20	0						
Lager	0	5	1	0	0						
Lard	0	0	2	7	0						
						Total	103	12	3	16	12

In addition to the above list, there is a quantity of goods, such as cigars, &c., of unspecified weight.

List C.

PROSECUTIONS FOR ADULTERATED MILK (HEADQUARTERS STAFF.)

Date .	Place.	Percentage Added Water.	Fines.	Costs.
1926.			£ s. d.	£ s. d.
1st July	Brisbane	75.3	30 0 0	1 4 6
1st July	Brisbane	13.4	10 0 0	1 4 6
5th July	Bundaberg	5.3	3 0 0	1 4 6
6th July	Maryborough	6.2	3 0 0	1 4 6
6th July	Maryborough	11.6	6 0 0	1 7 0
15th July	Brisbane	9.8	3 15 6	1 4 6
15th July	Brisbane	8.9	5 0 0	3 6 0
15th July	Sandgate	7.2	3 15 6	1 4 6
16th July	Charleville	11 6	4 0 0	1 4 6
16th July	Charleville	9.8	Withdrawn	
16th July	Charleville	11.1	4 0 0	1 4 6
19th July	Roma	22.5	15 0 0	1 4 6
19th July	Roma	10.5	5 0 0	1 4 6
20th July	Laidley	4.3	3 0 0	1 4 6
9th August	Brisbane	7.1	7 0 0	1 4 6
1927.				
2nd June	Sandgate	6.2	6 0 0	1 4 6
8th June	Gympie	13.4	5 0 0	1 4 6
9th June	Bundaberg	10.7	6 0 0	1 7 0
9th June	Bundaberg	8.9	3 0 0	1 4 6
28th June	Brisbane	22.5	20 0 0	1 4 6
28th June	Brisbane	13.4	13 0 0	1 4 6
	Totals .. ..	..	155 11 0	26 16 6
	Averages	13.8	7 8 1.7	1 5 6.6

FAT DEFICIENCIES.

Date.	Place.					Percentage Deficiency.	Fines.			Costs.		
1926.							£	s.	d.	£	s.	d.
9th August	Brisbane	..	..	..	..	30	2	0	0	1	4	6
9th August	Brisbane	..	..	..	..	30	5	0	0	1	4	6
30th August	Brisbane	..	..	..	..	36	5	0	0	1	4	6
Totals .. ..						..	12	0	0	3	13	6
Averages						32	4	0	0	1	4	6

List D.

PROSECUTIONS FOR ADULTERATED LIQUOR DURING YEAR ENDED 30TH JUNE, 1927.
(HEADQUARTERS STAFF.)

Date.	Place of Trading.					Class of Liquor.	Percentage Added Water.	Fines.			Costs.		
1926.								£	s.	d.	£	s.	d.
16th July	Charleville	..	..	..	..	Whisky	14.4	6	0	0	1	4	6
20th July	Wallumbilla	..	..	..	..	Whisky	5.4	10	0	0	1	4	6
1927.													
11th March	Tingoorra	..	..	..	..	Whisky	10.0	10	0	0	1	4	6
Totals .. ..						..	..	26	0	0	3	13	6
Averages .. ..						..	9.93	8	13	4	1	4	6

List E.

PROSECUTIONS UNDER THE POISONS REGULATIONS FOR YEAR ENDED 30TH JUNE, 1927.
(HEADQUARTERS.)

Date.	Place of Trading.					Charge.	Fines.			Costs.		
1926.							£	s.	d.	£	s.	d.
5th July	Bundaberg	..	..	..	..	Selling poison in a food container	3	0	0	1	9	6
13th July	Brisbane	..	..	..	..	Selling poison in a food container	1	15	6	1	4	6
19th July	Roma	..	..	..	..	Selling poison without a license	2	0	0	1	4	6
19th July	Roma	..	..	..	..	Selling unlabelled poisons	2	0	0	1	4	6
20th July	Wallumbilla	..	..	..	..	Selling poison in food container	3	0	0	1	4	6
21st July	Chinchilla	..	..	..	..	Selling poison without a license	1	0	0	1	4	6
21st July	Chinchilla	..	..	..	..	Selling poison without a license	2	0	0	1	4	6
21st July	Chinchilla	..	..	..	..	Selling poison without a license	2	0	0	1	4	6
1927.												
18th January	Southport	..	..	..	..	Selling poison in food container	1	0	0	1	4	6
18th January	Southport	..	..	..	..	Selling poison in food container	1	0	0	1	4	6
31st May	Brisbane	..	..	..	..	Selling poison without a license	3	0	0	1	4	6
31st May	Brisbane	..	..	..	..	Selling poison without a license	3	0	0	1	4	6
31st May	Brisbane	..	..	..	..	Unauthorised prescription	2	0	0	0	3	6
10th June	Brisbane	..	..	..	..	Unauthorised possession	2	0	0	3	6	6
Totals .. ..						..	28	15	6	18	9	0
Averages .. ..						..	2	1	1.3	1	6	4.3



PEEL ISLAND LAZARET—KITCHEN.



PEEL ISLAND LAZARET—PATIENTS' HUTS.

List F.

MISCELLANEOUS PROSECUTIONS CONDUCTED BY HEADQUARTERS STAFF FOR YEAR ENDED 30TH JUNE, 1927.

Date.	Place of Trading.	Charge.	Fines.	Costs.
1926.			£ s. d.	£ s. d.
12th July	Brisbane	Rag in milk can	2 0 0	0 3 6
13th July	Cunnamulla	Lightweight bread	5 0 0	0 3 6
15th July	Brisbane	Lightweight bread	8 0 0	0 3 6
15th July	Brisbane	Dirty milk cart	1 10 0	0 3 6
30th August	Brisbane	Dirty milk cart	0 10 0	0 3 6
30th August	Brisbane	Water in milk cart	5 0 0	0 3 6
30th August	Brisbane	Soap in milk can	2 0 0	0 3 6
30th August	Brisbane	Rag in milk can	2 0 0	0 3 6
30th August	Brisbane	Gum in milk can	3 0 0	0 3 6
10th September	Brisbane	Lightweight bread	8 16 0	2 18 0
10th September	Brisbane	Dirty yeast room	2 0 0	1 7 0
10th September	Brisbane	Dirty sanitary convenience	3 0 0	0 16 0
30th September	Brisbane	No name and license number displayed	0 10 0	0 3 6
30th September	Brisbane	Cart not covered	0 10 0	0 3 6
21st October	Brisbane	Cart not covered	1 0 0	0 3 6
1927.				
1st February	Brisbane	Exposed cherries	2 0 0	0 3 6
1st February	Brisbane	Exposed grapes	2 0 0	0 3 6
9th February	Brisbane	Exposed grapes	2 0 0	0 3 6
9th February	Brisbane	Exposed grapes	2 0 0	0 3 6
9th February	Brisbane	Exposed grapes	2 0 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	2 6 6	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	2 0 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
9th February	Brisbane	Exposed grapes	1 10 0	0 3 6
28th February	Ipswich	Adulterated limejuice cordial	1 0 0	1 4 6
28th February	Ipswich	Adulterated limejuice cordial	1 0 0	1 4 6
9th May	Wynnum	Adulterated fish	5 0 0	0 3 6
24th May	Brisbane	V. D. Regulation 14 (i.) (handling food-stuffs)	Dismissed without costs	
9th June	Bundaberg	Dirty bakehouse	4 0 0	0 3 6
9th June	Bundaberg	Dirty bakehouse	4 0 0	0 3 6
28th June	Brisbane	Water on milk cart	4 0 0	0 3 6
Totals			96 2 6	13 12 6
Averages			2 6 10·7	0 6 7·7

List G.

SAMPLES SUBMITTED TO THE LABORATORY OF MICRO-BIOLOGY DURING YEAR ENDED 30TH JUNE, 1927.

Nature of Sample.	No.
Disinfectants	5
Ice	2
Ice-creams	16
Milks, for T. B. and bacterial count	300
Soda water	1
Waters	19
Total	343

PEEL ISLAND LAZARET.

During the past year considerable improvements have been effected in respect to the buildings at the Lazaret.

In the past, two separate kitchens with separate staffs were in use, one for the white's compound, the other for the coloured inmates. However, these have been amalgamated so that now only one well-appointed kitchen is in use, a photo. of which is shown.

In addition, a new pumping windmill has been erected, and now that the surrounding timber has been removed the water pumping

arrangements are proving entirely satisfactory, whereas under the old-time conditions the services of an engine had to be availed of, which proved both slow and an expense to work.

New huts have also been built for occupation by patients, and the photo. depicts the type of building allotted to each white individual inmate.

Various field sports are much in evidence at the Larazet, such as tennis, football, and cricket.

In addition, the foreshores of Peel Island provide excellent fishing grounds for those piscatorially inclined, whilst others possess boats, so it may be seen that the patients are provided with everything possible in the shape of amusements to wile away their spare time.

The Health Officer, who regularly visits the Lazaret, has furnished the following report:—

On 1st July, 1926, there were 76 inmates in the Lazaret. These included 30 white males, 11 white females, 32 coloured males, and 3 coloured females.

During the year 2 white males, 4 coloured males, and 3 coloured females were admitted;

1 white male was readmitted after being discharged under surveillance four years previously; 3 white males, 2 white females, and 1 coloured male were discharged under surveillance; 1 white male and 2 coloured males died, and 1 white female escaped, probably to China, being of Chinese descent and married to a Chinaman.

The following table shows changes that have taken place amongst the inmates during the period under review, i.e., to 30th June, 1927:—

Inmates.	1st. July, 1926.	Admitted.	Re-admitted.	Discharged.	Died.	Escaped.	Remaining.
White males ..	30	2	1	3	1	..	29
White females ..	11	..	..	2	..	1	8
Coloured males ..	32	4	..	1	2	..	33
Coloured females ..	3	2	..	..	..	..	5
Totals ..	76	8	1	6	3	1	75

In addition to symptomatic and general tonic treatment, the patients receive sodium hydno-carpate in tablet form and by hypodermic and intramuscular injection, also Esters of Chaulmoogra in capsules and chaulmoogra oil derived from *Taraktogenos Kurzii* and from *Wightiana* seeds.

Six patients were discharged on condition that they report for examination at stated intervals. They are supplied with capsules of anti-leprol as a precaution against recurrence. Anti-leprol is the mixed Ethyl Esters of the fatty acids of Chaulmoogra Oil.

NURSES' REGISTRATION BOARD.

Arrangements during the year have been finalised in connection with securing reciprocity between the various Australian States, as well as between England and Wales and other nursing centres within the Empire, that require similar conditions in respect to length of hospital training, study, and examination of pupil nurses, as are in vogue in this State.

This has greatly simplified the procedure in dealing with nurses arriving in Queensland from overseas as well as interstate nurses, and in like manner has removed many of the former difficulties met with by nurses desirous of obtaining State registration without any vexatious delay, and through which they were at times hampered in obtaining employment without possessing State registration.

During the year it was found necessary to amend the Regulations in respect to the Schedule of Study for Maternity Nurses as regards infant feeding, which now require a maternity pupil nurse, in addition to ordinary midwifery training, to specialise in infant welfare.

Sectional examinations for nurses in training were held in October, when 649 candidates from

fifty training schools presented themselves for examination, the results being as follow:—

1st Section ..	..	..	..	208 passed
				145 failed
2nd section ..	..	..	..	129 passed
				43 failed
3rd section ..	..	..	..	99 passed
				25 failed
				649

Of those who failed, 198 sat for the post examination in December with the following result:—

1st Section ..	..	..	..	90 passed
				38 failed
2nd section ..	..	..	..	41 passed
				6 failed
3rd section ..	..	..	..	20 passed
				3 failed
				198

The usual examinations for general nurses training under the provisions of the 1912 Regulations, as well as for nurses training in midwifery and mental hospitals, were held in October and March, the results being as follow:—

October Examination.

General section ..	..	..	..	5 passed
				16 failed
Midwifery section ..	..	..	..	43 passed
				4 failed
Mental section ..	..	..	..	11 passed
				16 failed

March Examination.

General section ..	..	..	..	29 passed
				8 failed
Midwifery section ..	..	..	..	43 passed
				5 failed
Mental section ..	..	..	..	5 passed
				16 failed

Owing to the fact that there are now very few nurses training under the 1912 Regulations, the March examinations for general nurses have been discontinued.

Section 207.—Thirty (general 14, midwifery 14, mental 2) nurses were registered, having produced evidence that they possessed satisfactory training, and were certificated by having passed a qualifying examination.

Section 208.—Thirteen (general 5, midwifery 8) nurses who produced evidence that they were following the calling of a nurse during the years 1909, 1910, and 1911 were registered, on the approval of the Home Secretary.

The following hospitals were granted registration as training schools for general nurses:—Mater Misericordiae Hospital, Mackay; St. Mary's Hospital, Maryborough; Richmond District Hospital, Richmond; and Torres Straits Hospital, Thursday Island.

Ormoud Private Hospital, Mackay, ceased to exist, and its registration accordingly lapsed.

LABORATORY OF MICROBIOLOGY.

The report of the Laboratory of Microbiology, as furnished hereunder, shows a large increase in the work performed by the staff, and which at times required the performance of overtime so as to meet the necessity in furnishing early

results of examination in respect to diphtheria swabs, as well as the preparation of some 57,500 Loeffler's serum media for the growing of the diphtheria bacillus, and for which large weekly orders were received from centres throughout the whole of the State.

Some 25,794 diphtheria swabbings were examined. Large numbers of diphtheria cultures were supplied to meet the demands of outside laboratories.

In addition, 40,011 rat carcasses were classified and spleens examined for plague, whilst a large number of spleen smears from outside centres were examined for plague bacilli.

The conduct of the work performed has been most satisfactory, especially in view of a marked increase in the number of specimens examined as recorded.

Report of work carried out at Laboratory of Microbiology for year ended 30th June, 1927.

The number of specimens received makes the total for this year 87,793, which represents an increase of 5,255 on that of 1926, 12,875 on that of 1925, and 23,147 on that of 1924.

This is practical evidence of the continued and increased confidence placed in the Laboratory.

The following tabular statement shows the source of the specimens received for examination by the Laboratory:—

Specimens from—	Medical Practitioners.	Hospitals.	Council and Government Institutions.
Within the Brisbane area ..	93	10	6
Outside the Brisbane area	68	48	24

Referring to the number of rodents examined, a decrease of 7,406 is noted on that of last year, and since the efficiency of the result of our examination for the first evidence of plague depends largely on a good percentage of rats and mice from the areas patrolled, a diminution, if due to the laxity of those concerned, is regrettable.

The Laboratory during the year prepared no less a number than 57,500 Loeffler's serum media for the diphtheria bacillus, orders up to 5,000 a week being at times required. All these were supplied by the Laboratory with the least possible delay, although to do so required at times a considerable lengthening of the working day. Throughout such times of stress I have had the very willing co-operation of each member of the staff.

Cultures were supplied to the Commonwealth Laboratories—Rockhampton, 7,424; Toowoomba, 5,400; Townsville, 4,608.

Plague.—The number of rodents destroyed during the year shows a decrease of 7,406. Of the 40,011 received, all were examined, but in none of them was the plague bacillus found. All rats received were classified as follows:—

Rattus Norvegicus	24,071
Rattus Rattus Rattus	3,059
Rattus Rattus Alexandrinus	5,624
Hydromys Leucogaster	3
Unclassifiable (very young rats)	5,448
Mus Musculus	1,806

Two rats examined showed the presence of rat leprosy.

Spleen smears from rats in the Northern towns showed, in some of the places, an increase, while in others, a decline is noted; but in none of them was the plague bacillus found.

Diphtheria.—There was a very marked increase in the number of swabbings submitted for examination—25,794 as against 8,732 for last year; and the number in which the bacillus was found shows a percentage of about 15.2.

Venereal Disease.—An increased number of smears were submitted for the examination of the gonococcus, and the number in which the coccus was found was about the same percentage as last year. The blood sera examined for the Wassermann reaction showed a decrease, and the number giving a positive reaction was a percentage of 25.5, compared with 9 of last year.

Tuberculosis.—A decreased number of sputa was examined for the tubercle bacillus, and the bacillus was found in a number that was an increase in the percentage over last year.

Typhoid.—An increased number of bloods was examined for Widal's agglutination test, and the number positive showed an increase in the percentage over last year. The number of urines and faeces also shows an increase.

Leprosy.—A decreased number of smears was examined for the bacillus lepræ, but the majority of those were from persons suffering from the disease—patients of the Lazaret.

Vaccines.—A decreased number of autogenous vaccines was made, but the amount of anti-typhoid vaccine supplied shows an increase.

Miscellaneous.—The number of miscellaneous specimens, which include waters, disinfectants, milks, ice cream, &c., shows in some a marked increase.

H. E. BROWN,
Assistant Bacteriologist.

REPORT ON SPECIMENS RECEIVED IN LABORATORY DURING THE YEAR ENDING 1926-27.

Examination.									Health and Hospitals.	Private Practitioners.	Total.
Diphtheria—											
Swabbings									23,008	2,786	25,794
Virulent tests									8	16	24
Gonorrhœa—											
Smears									8,539	1,393	9,932
Complement deviation test									183	2	185
Syphilis—											
Wassermann reaction									893	385	1,278
Spirochætes									..	4	4
Typhoid—											
Widal reaction									58	47	105
Urines									310	30	340
Fæces									348	38	386
Vaccines—											
Sputum									..	3	3
Cultures									4	6	10
Pus									2	2	4
Organisms—											
Sputum									..	12	12
Cultures									4	1	5
Urines									1	3	4
Pleural Fluid									..	2	2
Pus									1	1	2
C. S. Fluid									5	1	6
Fæces									..	2	2
Examinations—											
Milk (count)									309	..	309
Milk (T. B.)									300	..	300
Ice cream and ices									17	..	17
Ice									2	..	2
Waters									32	..	32
Soda water									2	..	2
Sterility—											
Kangaroo tendons									1	..	1
Sodium Hydno carpate									1	..	1
Disinfectants—											
Coefficient									5	..	5
Medico-Legal—											
Blood stains									3	..	3
Seminal stains									7	..	7
Tuberculosis									262	234	496
Leprosy									799	67	866
Tetanus									2	1	3
Tinea									..	1	1
Malaria									5	1	6
Filaria									4	2	6
Dysentery									..	1	1
Hookworm									2	5	7
Differential count (blood)									5	..	5
Totals									35,122	5,046	40,168

EXAMINATION OF RATS AND MICE FOR PLAGUE.

Rodents, received from—	Rats.	Mice.	Total.
Department of Public Health	1,714	52	1,766
Brisbane Council	36,422	1,752	38,174
Miscellaneous	69	2	71
Total	38,205	1,806	40,011

Rodents destroyed by Brisbane City Council (not examined), 3,683 rats, 188 mice

RAT SMEARS RECEIVED DURING THE YEAR.

Maryborough	3,115
Cairns	1,448
Gympie	944
Bundaberg	992
Ipswich	717
Mackay	386
Douglas	12
	7,614
Grand total	87,793

Requisitions received during the year, 587.

CULTURE MEDIA PREPARED IN THE LABORATORY DURING THE YEAR 1926-27.

Ordinary Agars—					
Deep	..	..	..	..	141
Small slopes	..	..	..	..	311
Large slopes	..	..	..	..	172
					624
Ordinary Broth—					
Small tubes	..	..	..	..	715
Bottles	..	..	..	..	24
					739
Broth for Disinfectants—					
Tubes	..	..	..	..	330
Serum Cultures—					
Ox serum slopes	..	..	..	..	57,500
Ox serum plates	..	..	..	..	30
Human serum plates	..	..	..	..	106
					57,636
McConkey's Medium—					
Tubes	..	..	..	..	12
Brilliant Green Medium for B. Typhosus—					
Plates	..	..	..	..	954
Peptone Water—					
Tubes	..	..	..	..	36
Carried forward	..	..	..	..	60,331

CULTURE MEDIA PREPARED IN THE LABORATORY DURING THE YEAR 1926-27—continued.

Brought forward				60,331
Sugars—				
Tubes—				
Lactose .. ..	..	..	..	100
Saccharose .. ..	..	..	..	40
Arabinose .. ..	..	..	..	45
Mannite .. ..	..	..	..	45
Glucose .. ..	..	..	..	45
Dulcite .. ..	..	..	..	40
Amygdalin .. ..	..	..	..	40
Raffinose .. ..	..	..	..	40
Salacin .. ..	..	..	..	40
Adonite .. ..	..	..	..	35
Sorbite .. ..	..	..	..	30
				500
Treble Lactose—				
Tubes .. ..	..	..	..	18
Bottles .. ..	..	..	..	15
				33
Litmus Broth—				
Bottles .. ..	..	..	..	5
Tubes .. ..	..	..	..	24
				29
				60,893

ADMINISTRATION.

Public Health administration must, in order to secure success in its operations, fully co-ordinate with the efforts of local governing bodies by obtaining uniformity of action in dealing with and endeavouring to prevent the spread of infectious disease, and unless whole-hearted co-operation exists, as well as uniformity of procedure, in carrying out precautionary measures, satisfactory results are difficult to attain.

With this end in view, this Department frames Regulations to cover all possible contingencies that may arise, but in spite of every precaution being taken it occasionally happens that cycles of some particular infectious disease will occur without any apparent reason and without restriction to any particular State or area.

The responsibilities of public health administration more than ever require to be placed in the hands of well-trained and efficient officers, consequently this Department insists upon Local Authorities employing only certificated health inspectors, and, in order to provide for such officers being available, lectures on sanitation and allied subjects have been arranged for from year to year, when a final qualifying examination is held for students who aspire to obtain positions as health inspectors. This arrangement is proving eminently satisfactory to the various Councils as well as to this Department.

On my tours of inspection throughout the State I make it a practice to meet the chairmen and members of the various Councils, when health matters generally are discussed, as by this means a keener interest is enlivened and oftentimes difficulties under discussion are explained.

The modern trend of public opinion is fast recognising that public health is no longer to be regarded as an incubus having for its insignia a death head receptacle for swallowing public funds. Economics must perforce recognise the axiom "A penny saved is a penny gained," so it follows that a Public Health Department may claim, without being unreasonable, that, in protecting the wage-earner and ratepayer against disease, it has fulfilled its functions, not only as a public utility, but also economically has acted as an insurance medium against disease. The

fact that such a Department is not a revenue-producing one should not weigh against its being amply provided with the necessary funds, as no one expects, say, a Fire Brigade to produce revenue in actual cash, yet on the other hand, like a Health Department, it renders an essential service and at the same time saves, out of all proportion, the cost of its upkeep.

The following amendments or alterations to the Regulations were made during the year:—

The Diphtheria, Scarlet Fever, and Typhoid Fever Regulations of 1925 were repealed by the Diphtheria, Scarlet Fever, and Typhoid Fever Regulations of 1927, which were gazetted on the 5th March, 1927.

The Spitting Regulations were also re-gazetted on the 5th March, 1927.

The Mosquito Prevention and Destruction Regulations of 1921 were re-gazetted, with amendments, on 5th March, 1927, under the title of "The Mosquito Prevention and Destruction Regulations of 1927."

The Nurses' Registration Regulations of 1925 were amended on the 17th February, 1927, to provide that registered general nurses shall be deemed to have complied with the Regulations dealing with midwifery training if they have personally and individually conducted ten cases during delivery, and if they have attended at least ten other cases in conjunction with one other registered nurse during delivery, and have otherwise complied with the Regulations. A further amendment to the Nurses' Registration Regulations of 1925 were gazetted on 4th June, 1927, and which provided for the enlargement of the schedule of study for midwifery nurses by the inclusion of additional study and lectures on infant feeding and the care of the newborn.

The Shire of Jericho was added to the list of areas in which the provisions of Part VIII. of the Health Acts, relating to lying-in hospitals, apply, by Order in Council gazetted on the 24th July, 1926.

STAFF.

The personnel of the head office staff consists of the following officers:—Commissioner of Public Health (Dr. J. I. Moore); Health Officer (Dr. J. Coffey), Secretary, Senior Clerk, four clerks, two typists, two messengers, and a staff nurse.

In the inspectorial branch there are two chief inspectors, seven inspectors, and three assistants to inspectors; these latter officers have received instruction throughout the past year and in accordance with the policy of the Department tests of their knowledge are made by giving them special work to perform, such as reporting on the sanitation of premises and localities close to the city and furnishing reports to the Chief Inspector, who again passes same on to me or my deputy with his comments; also tests in a similar way are made as to their knowledge concerning food sophistication and reports made in the same way; thus assistant inspectors are trained so as to come up to the required standard when they eventually take their places as fully trained officers in accordance with the Award made on their behalf.

In addition, seven inspectors are stationed at outside centres.

The staff of the Laboratory consists of an assistant bacteriologist, a second assistant bacteriologist, an assistant to bacteriologist, two laboratory attendants, a typiste, and a female glass cleaner.

Four part-time medical officers attend to the venereal diseases work, with a part-time chemist, and one lay attendant. A matron, a nurse, as well as a cook and laundress do the necessary work at the Venereal Isolation Hospital. In addition, there are part-time medical officers at outside centres in connection with venereal work.

There is also a part-time medical officer in connection with the pulmonary tuberculosis bureau.

The Lazaret staff consists of a superintendent, an assistant, a nurse, a housekeeper, four cooks, and four attendants.

The rat gang comprises a foreman and eight men for rat and disinfecting work.

The changes among the personnel of the staff during the year were as follows:—

Dr. John Coffey, Health Officer, appointed Deputy Commissioner during the temporary absence of the Commissioner.

Eric Joseph McGuinness appointed Clerk from 5th July, 1926.

Inspectors Charles William Beaver, Alfred Leo Edghill Mason, and Charles Mitchell, of the Metropolitan Inspectorial Branch, were transferred to Charleville, Mackay, and Cloncurry, respectively.

John Clark Philp, Inspector under the Health Acts, resigned his position from 14th December, 1926.

Acting Assistants to Inspectors William Henry Kelly and Robert Woodley appointed Assistants to Inspectors from 1st October, 1926.

Alice May Doughney, nurse at Peel Island Lazaret, resigned as from 14th December, 1926, and Nurse Annie Dwyer was appointed in her stead.

In conclusion, I desire to tender my thanks to other branches of the Service, particularly the Crown Law Office, Police, and Government Analyst's Department for services rendered during the year.

I am, &c.,
J. I. MOORE, M.D., F.R.C.S., D.P.H.,
Commissioner of Public Health.

GOVERNMENT CHEMICAL LABORATORY.

Brisbane, 6th August, 1927.

The Commissioner of Public Health, Brisbane.

SIR,—I have the honour, in accordance with Section 31 of “*The Health Acts, 1900 to 1922*,” to submit the following report of work done in the Government Chemical Laboratory for the Department of Public Health during the year 1926-7. The number of samples examined during this period was 2,187, an increase of 176 samples on the work of the previous year. The following table gives a summary of the work done:—

TABLE I.

Food or Drug.	Total Number of Samples.	Passed.	Failed.
Beer	26	26	..
Beverages and cordials	437	147	290
Cereal preparations	14	10	4
Condiments	22	18	4
Confectionery	11	9	2
Essences	32	24	8
Fats (edible)	12	12	..
Fish, tinned and cured	21	13	8
Fruit (preserved)	9	5	4
Jam and honey	28	24	4
Meat and Vegetables—			
Tinned	18	5	13
Not tinned	24	8	16
Milk, fresh	1,007	891	116
Milk preparations	10	6	4
Oils (miscellaneous)	19	19	..
Soap	13	11	2
Spirituous liquors	40	22	18
Vinegar	21	21	..
Wine	28	27	1
	1,792		
Disinfectants	23		
Drugs and medicines	47		
Toilet preparations	31		
Water	46		
Wool dip	1		
Miscellaneous	247		
	2,187		

Of the total number of samples of foods and drugs submitted, 1,139 were legal samples taken by inspectors strictly in accordance with the provisions of the Health Acts. The results are shown in Table II.—

TABLE II.

Nature of Sample.								Number of Samples.	Passed.	Failed.	Unsuitable for Exact Analysis
Milk	..	..	..	..	..	..	..	941	742	154	45
Soda Water	..	..	..	..	..	..	..	149	37	112	..
Spirituous liquors	..	..	..	..	..	..	..	31	13	18	..
Miscellaneous	..	..	..	..	..	..	..	13	3	10	..
								1,134	795	294	45
Poisons	..	..	..	..	..	..	..	5			
								1,139			

The following table records details in regard to the 941 legal samples of milk:—

TABLE III.

Place.								Number of Samples.	Passed the Standard.	Genuine but below the Standard.	Deficient in Fat.	Adulterated with Water.	Average Percentage of Added Water.	Unfit for Exact Analysis.
Beaudesert	..	..	..	..	..	..	..	3	3	..	..	..	..	..
Brisbane North	..	..	..	..	..	..	..	167	147	9	2	9	9	..
Brisbane South	..	..	..	..	..	..	..	116	97	13	2	4	13	..
Brisbane cafés	..	..	..	..	..	..	..	76	30	19	20	7	10	..
Burleigh	..	..	..	..	..	..	..	3	3	..	..	..	..	..
Bundaberg	..	..	..	..	..	..	..	22	20	..	..	2	10	..
Caboolture	..	..	..	..	..	..	..	4	4	..	..	..	..	..
Cairns	..	..	..	..	..	..	..	43	39	..	..	4	5	..
Charleville	..	..	..	..	..	..	..	16	8	..	8	..	..	..
Coolangatta	..	..	..	..	..	..	..	3	3	..	..	..	..	..
Dalby	..	..	..	..	..	..	..	10	4	..	6	..	..	..
Gympie	..	..	..	..	..	..	..	18	17	..	..	1	14	..
Ipswich	..	..	..	..	..	..	..	50	42	3	..	5	15	..
Laidley	..	..	..	..	..	..	..	1	1	..	..	..	..	..
Manly and Wynnum	..	..	..	..	..	..	..	27	27	..	..	..	..	..
Maryborough	..	..	..	..	..	..	..	26	22	..	2	2	4	..
Mitchell	..	..	..	..	..	..	..	2	2	..	..	..	..	..
Mount Morgan	..	..	..	..	..	..	..	8	3	1	3	1	5	..
Rail (Roma Street)	..	..	..	..	..	..	..	78	75	..	3	..	..	..
Rail (South Brisbane)	..	..	..	..	..	..	..	50	50	..	..	..	..	..
Redcliffe	..	..	..	..	..	..	..	7	..	..	..	..	..	7
Rockhampton	..	..	..	..	..	..	..	38	..	..	..	..	..	38
Rosewood	..	..	..	..	..	..	..	3	3	..	..	..	..	..
Sandgate	..	..	..	..	..	..	..	30	25	3	1	1	4	..
Southport	..	..	..	..	..	..	..	8	8	..	..	..	..	..
Toowoomba	..	..	..	..	..	..	..	94	87	3	1	3	10	..
Townsville	..	..	..	..	..	..	..	14	10	..	..	4	15	..
Warwick	..	..	..	..	..	..	..	22	12	1	2	7	35	..
Westwood Sanatorium	..	..	..	..	..	..	..	2	..	..	..	2	12	..
								941	742	52	50	52	14	45

The milk arriving by rail was, as generally, found to be free from adulteration with water.

TABLE IV.
Summary of Table III.

	Number of Samples.	Percentage.
Adulterated with water	52	5.5
Deficient in fat	50	5.3
Lost in transit or unfit for analysis	45	4.8
Genuine, but slightly below the standard	52	5.5
Passed the standard	742	78.9
Total	941	100 0

The following table shows the milk position as compared with the four previous years:—

TABLE V.

Year.		Number of Legal Samples.	Percentage Failed.	Average Percentage Added Water.
1922-23	.. ..	656	18	10
1923-24	.. ..	525	16	14
1924-25	.. ..	697	9	10
1925-26	.. ..	1,027	13	8
1926-27	.. ..	941	11	14

During the year it was discovered that samples of soda water from soda water fountains contained lead in appreciable quantities. Ordinary soda water in bottles was tested, and all samples were found to be free from lead. Fountain soda water is made in a tin-lined steel vessel called a “carbonator.” This vessel has a stirrer, an inlet pipe for water and one for carbonic acid gas. It was found that, although the use of solder or other alloy containing lead is forbidden by the Health Regulations in any vessel containing moist or liquid food, the interior of nearly all these carbonators was liberally covered with solder where the pipes entered the container, on the stirrers, and on the joints of the tin lining. The solder contained generally about 40 per cent. of lead, and the proportion of the interior surface covered by solder was in one case as high as 15 per cent., and even in a new carbonator 7.5 per cent. of the interior was covered with solder. The tin linings themselves were all of good or fairly good tin, the proportion of lead found in the tin being in no case over 0.2 per cent., and generally considerably less.

It has been known for centuries that ordinary water dissolves lead, and that such waters containing lead are poisonous. Hard waters have little or no dissolving effect on lead, and it was noteworthy that while the comparatively soft Brisbane water readily took up lead from the carbonators, the hard water supply at Too-woomba dissolved no lead from exactly similar carbonators.

A very large amount of work was done examining tin linings, solders, connecting hose pipes, rubber washers, &c., for lead, in assisting the traders to get over this difficulty. Considerable trouble was experienced in getting the carbonators freed from lead-containing surfaces, and in getting the fountain soda waters freed from lead. Success was finally obtained by using artificially "hardened" water in carbonators containing no lead-solder surfaces.

The extent to which the fountain soda waters were contaminated with lead is shown in the following table:—

TABLE VI.						
Lead in Soda Water from Carbonators.						
Grains of Lead per gallon of Soda Water.						Number of Samples.
Nil	..	..	..	..	..	68
1/300ths to 1/100th	..	..	..	..	..	83
1/100th to 5/100ths	..	..	..	..	..	86
5/100ths to 10/100ths	..	..	..	..	..	75
10/100ths to 15/100ths	..	..	..	..	..	39
15/100ths to 20/100ths	..	..	..	..	..	21
20/100ths to 30/100ths	..	..	..	..	..	6
30/100ths to 40/100ths	..	..	..	..	..	6
60/100ths to 75/100ths	..	..	..	..	..	4
75/100ths to 1.1	..	..	..	..	..	6
Total	..	..	..	..	..	394

It is generally accepted that water containing any proportion of lead greater than 5/100 grain per gallon is dangerous. At least half of the samples tested contained more than this proportion, and, as the table shows, some contained much more. The following figures give the results of analysis of a sample of good sheet tin which was being used for relining carbonators in Brisbane:—

	Per cent.
Tin	99.75
Iron	0.046
Copper	0.020
Bismuth	0.016
Antimony	0.018
Sulphur	0.018
Arsenic	0.016
Lead	0.024
Undetermined	0.092
Total	100.000

Of the twenty-six samples of beer examined, twenty-three represent practically all the brands on the Brisbane market. Most of the Australian beer contained salicylic acid ranging from 0.5 to 1.5 grains per gallon. The lager beer from Germany and London was free from preservatives.

All the samples were free from lead and arsenic. Most of the results are shown below:—

TABLE VII.									Description.	Proof Spirit.	Extract.	Mineral Constituent.
Place of Origin.												
										%	%	%
Adelaide	..	..	..	..	..	..	..	..	Beer	8.0	3.2	0.1
Brisbane	..	..	..	..	..	..	..	..	Ale	8.4	3.4	0.2
Brisbane	..	..	..	..	..	..	..	..	Ale	7.5	4.1	0.1
Brisbane	..	..	..	..	..	..	..	..	Ale	7.7	4.2	0.2
Brisbane	..	..	..	..	..	..	..	..	Ale	11.8	3.7	0.1
Brisbane	..	..	..	..	..	..	..	..	Ale	7.0	4.4	0.2
Brisbane	..	..	..	..	..	..	..	..	Lager	7.0	6.4	0.1
Melbourne	..	..	..	..	..	..	..	..	Ale	9.3	4.7	0.2
Melbourne	..	..	..	..	..	..	..	..	Beer	11.8	4.7	0.4
Melbourne	..	..	..	..	..	..	..	..	Beer	9.7	5.0	0.3
Melbourne	..	..	..	..	..	..	..	..	Lager	9.9	5.2	0.1
Melbourne	..	..	..	..	..	..	..	..	Lager	8.9	4.2	0.2
Melbourne	..	..	..	..	..	..	..	..	Lager	9.3	5.2	0.1
Sydney	..	..	..	..	..	..	..	..	Lager	9.0	3.4	0.1
Sydney	..	..	..	..	..	..	..	..	Lager	8.0	5.1	0.2
Sydney	..	..	..	..	..	..	..	..	Lager	7.9	4.8	0.2
Sydney	..	..	..	..	..	..	..	..	Lager	9.2	4.8	0.1
Sydney	..	..	..	..	..	..	..	..	Ale	12.0	3.2	0.1
Tasmania	..	..	..	..	..	..	..	..	Ale	11.4	4.1	0.3
London	..	..	..	..	..	..	..	..	Lager	10.6	5.2	0.2
London	..	..	..	..	..	..	..	..	Ale	12.2	3.0	0.3
Germany	..	..	..	..	..	..	..	..	Lager	11.4	4.5	0.2
Germany	..	..	..	..	..	..	..	..	Lager	6.7	4.3	0.2

Eleven samples of acetylsalicylic acid sold under various names, such as aspirin, &c., were examined. The weight of acetylsalicylic present in the tablets was very consistent, the greatest variation being only 4 per cent. Only two samples failed to disintegrate in water in two minutes, which has been suggested as the maximum time for the disintegration of acetylsalicylic acid tablets in water. The British Pharmacopœia prescribes no quantitative standard for free salicylic acid, but the qualitative test given therein allows of about 0.1 per cent. being present. This proportion is, however, not high

enough for a tropical climate, and we have found it necessary to adopt a tentative maximum of 0.5 per cent. Only one sample exceeded this limit. One sample contained a sodium salt probably used under the impression that it would prevent hydrolysis of acetylsalicylic acid. It has been suggested that, as the presence of free salicylic acid can be masked by a trace of citric or tartaric acid, a small proportion of one of these acids should be added to the tablets. Two samples contained sufficient of these acids to mask the ordinary sorting-out test for free salicylic acid.

The vendors of hair dyes display no originality in regard to their composition, as the formulas in use are mostly very old, and are shown in almost every book of chemical recipes. The following list indicates their composition:—

1. Lead acetate and sulphur.
2. Henna, wheat starch, and pyrogallie acid.
3. Paraphenylenediamine.
4. Silver nitrate and ammonium sulphide solution.
5. Silver nitrate and pyrogallie acid solution.
6. Pyrogallie acid and copper salts.
7. Silver nitrate and copper nitrate.
8. Henna powder and copper salts.

The use of paraphenylenediamine as a hair dye has been reported to produce skin eruptions, eczema, nausea, or nervous symptoms, sleeplessness, dizziness, weakness or impairment of vision.

A considerable number of samples of human milk and some samples of infants' foods have been analysed for various baby clinics to assist in their control of cases under observation.

The miscellaneous samples included 91 samples of urine (from the Brisbane Hospitals Board), and samples of paint, cigarettes, cigars, sputum, hydrometers, pest destroyers, gelatine, and thermometers.

Yours faithfully,

J. B. HENDERSON,

Government Analyst.

Price, 1s. 3d.]

By Authority: ANTHONY JAMES CUMMING, Government Printer, Brisbane.

